GETTING IT RIGHT

Policy Review and Outlook, 1990

Thomas E. Kierans
Editor

C.D. Howe Institute

C.D. Howe Institute

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Foreword

This is the C.D. Howe Institute's sixteenth annual *Policy Review and Outlook*. The purpose of the series is to review major developments affecting the Canadian economy, and to address the key policy areas that will demand the attention of Canadian governments in coming years.

On the threshold of a new decade, it is useful — and sobering — to reflect on the inevitable uncertainties surrounding long-term policy prescriptions. The experience of the past two decades provides ample reminder that policy analysts must be cautious about extrapolating from recent experience, and humble about their ability to foresee new developments. The main theme of this *Review* is, accordingly, that in an uncertain economic environment, it is all the more important for government to get right those things that it can. In dealing with the challenges confronting Canadians in five key areas — monetary policy, structural policy, social policy, fiscal policy, and environmental policy — it will be necessary for government to focus firmly on the long-term goal of promoting Canadians' well-being through an adaptable economy and strong investment in physical and human resources.

Unlike previous volumes in this series, *Getting It Right* is a collection of essays by different authors, resting on a common philosophical foundation, but reflecting the particular concerns and policy priorities of each author.

Chapter 2 was contributed by David Laidler, Professor of Economics at the University of Western Ontario and Scholar-in-Residence at the Institute, and one of Canada's best-known monetary economists. Robert York, the author of Chapter 3, is a policy analyst at the Institute who has written extensively on Canadian trade issues. Chapter 4, by Thomas J. Courchene,

Director of the School of Policy Studies, Queens' University, and Senior Fellow of the C.D. Howe Institute, draws on his more than two decades of involvement in Canadian social policy issues. Chapter 5 was written by Irene Ip, the Institute's Senior Policy Analyst, who has written extensively on public finance, and William B.P. Robson, Policy Analyst, the author of several Institute papers on federal fiscal policy. Chapter 6 reflects my concerns about the need for an appropriate framework for Canadian environmental policy in the 1990s. The manuscript was quickly and carefully prepared by Brenda Palmer; Barry Norris provided expert editing and desktop publishing.

The essays in this volume reflect extensive consultations among the authors, as well as numerous comments and suggestions from outside experts and members of the C.D. Howe Institute Policy Analysis Committee, whose assistance is gratefully acknowledged. As always, the conclusions are the responsibility of the authors and do not necessarily reflect the views of the Institute's members or its Board of Directors.

Thomas E. Kierans
President

1

Introduction

Thomas E. Kierans

So much changed, so unexpectedly, between 1969 and 1979, and again between 1979 and 1989, that forecasters today must approach the coming decade gingerly, with caution and humility. So much the better!

By 1969, Canada had put in place most of the elements of a modern welfare state. Economic growth had been so strong for so long that the public purpose had shifted. Efficiency concerns had given way to equity considerations. Managing risk had been subsumed by the desire for security. And, most tellingly, safety nets for the disadvantaged had been buttressed with entitlements for all.

Secure within its own borders, Canada had felt able to implement economic and social policies without much concern for their international reverberations, particularly on competitiveness. And Canadians, enjoying strong gains in real disposable income, regarded governments and their agencies benignly. Wanting to purchase more public goods and services, they saw government as the appropriate supplier.

The 1970s unexpectedly brought energy price shocks, stagflation, and cumulating deficits, but Canadian governments continued to experiment with interventionist policies, seeking to shape the domestic environment. And Canadians accepted and then expected that their governments would cushion them from shocks and the impacts of change.

The 1980s marked a slow and painful retreat from those attitudes as the magnitude of international developments impressed on many the futility of narrow, homecast policies. Capital became increasingly mobile as the revolution in communications technology permitted instantaneous transfers between financial markets. Roaming the globe, private pools of capital far eclipsed central banks' resources to deflect their course. And trade patterns shifted dramatically as Japan and other Pacific Rim countries indelibly imprinted their industrial capacities on the Western economies.

After enduring the 1981–82 recession — the severest in half a century — Canada began to adapt. Most importantly, the mindset of Canadian policymakers shifted. At last, the emphasis focused on looking outward, on assessing Canada's place in the international context, and on evaluating the significance of international developments for the Canadian economy. Governments began to recalibrate policies accordingly.

Looking outward, then, is a principal theme of *Getting It Right*, the C.D. Howe Institute's sixteenth annual *Policy Review and Outlook*. During the 1980s, much was accomplished to increase Canada's efficiency and flexibility; during the 1990s, more, much more, must be achieved.

The global panorama is so vast and its interrelationships so complex that the outlines of the future can only be perceived dimly. Acknowledging, finally, that Canada is only a part of the whole, we cannot prepare for every eventuality or guard against every intrusion. What Canadians can and must do, however, is put the economy in the best possible shape to contend with, and to take advantage of, pervasive change and intensified competition.

The challenge for policymakers, therefore, is to articulate goals that underpin and reinforce Canada's strengths, and to proceed toward those goals in a focused and consistent fashion. Predictability at home is a key strategy for dealing with the confusion and pace of change abroad.

By the same token, flexibility and adaptability must be the hallmark of Canada's policy instruments. Systems that do not facilitate economic adjustment and competitiveness will impede society's attempt to achieve its economic and social goals.

These themes, then, underline each of the chapters comprising this year's *Policy Review and Outlook*.

David Laidler emphasizes the importance for Canada's competitiveness of getting the inflation rate down; a 5 percent inflation rate is sufficiently high to seriously distort the allocation of resources. The goal of monetary policy is — and ought to be — price stability, and not the achievement of external balances or the amelioration of regional disparities. Adjustment toward zero inflation will cause some dislocations, but it is preferable to social inequities created by rising prices. Moreover, price stability cannot be achieved if monetary policy is hamstrung by concerns about exchange-rate and interest-rate levels.

Robert York builds on the Institute's analyses of the Free Trade Agreement, reiterating the importance of adjusting policies that impede Canada's ability to compete and to export. He singles out agricultural subsidies and supply-management practices as untenable over the longer term and much in need of reform. So, too, are interprovincial trade barriers, which reduce Canada's competitiveness and which can only be described, in the aftermath of the Agreement, as perverse. There now exist instances of freer north-south than east-west trade patterns. Competitiveness will also be enhanced through greater efforts to expand the high-technology sector. Developing a high-tech presence will be important to Canada's future living standards.

Tom Courchene explores Canada's social policy options, contrasting the contradictions inherent in a universal system that confers entitlements with the social and economic imperatives of preserving and upgrading this country's human capital. Human capital is a crucial element ensuring Canada's global competitiveness; more than that, individual opportunity is the glue that binds society. Yet, the social system is malfunctioning and unresponsive. A major overhaul is in order.

Irene Ip and Bill Robson examine the fiscal challenge, stressing the importance to economic growth of a fiscal system that is consistent, predictable, open, and controlled. Unsound fiscal policies tend to acquire a momentum of their own, destabilizing the entire economy. At the federal level, improvements were made on many counts in the latter half of the 1980s. Further expenditure cuts are necessary, however, to contain the growth of the public debt and to allow for emerging priorities, such as child care, job-training assistance, and the environment. With reservations, Ip and Robson support the introduction of the goods and services tax as a replacement for the federal sales tax for reasons of competitiveness and fiscal stability.

In the final chapter, I assess principles to which government should adhere in developing an environmental policy framework. Acknowledging that the environment poses challenges that only government can address, I stress the importance of market mechanisms as policy instruments. I also examine the tradeoffs between growth and the environment, concluding that modern industrialized societies, through technological innovations, can do much to reduce adverse effects on the environment, while sustaining economic growth.

No one can deny the difficulties and stresses associated with preparing for change, and some of the suggestions presented in this *Policy Review and Outlook* will tax the political will. In retrospect, the 1960s may seem like a golden age, but that era did not prepare this country for the challenges of the

1970s. Canadians finally made a start, but only that, in the latter half of the 1980s. It must now be built on. If we are to realize our potential in the 1990s and beyond, it will be essential to keep long-term goals in each of the policy areas addressed in this volume firmly in focus, and to be sure, as we meet the unexpected challenges of a new decade, that we are getting it right.

2

Monetary Policy

David Laidler

The popular perception of Canadian monetary policy over the past year or so is that the Bank of Canada has been systematically and resolutely struggling to bring under control stubborn inflationary pressures and that, if anything, it has erred on the side of stringency in carrying out its policy. Some of this perception no doubt stems from the fact that short-term interest rates have been maintained at rather high levels, especially as compared with those ruling in the United States, but a good deal of it stems from the rhetoric that has accompanied the policy.

There is more to monetary policy, however, than rhetoric and a high Bank Rate (the rate at which the Bank of Canada makes advances to the chartered banks). As this chapter explains, though the Bank's clearly stated principles merit support, their application in recent years has been less consistent than is commonly believed. Accordingly, the Institute recommends that, in the coming year, the Bank should:

- become more single minded about matching actions with words;

- ensure that it does not accommodate an already too lax fiscal policy under the banner of achieving a better monetary-fiscal policy balance; and
- be careful not to subordinate the pursuit of price stability to any attempt to cope with regional difficulties, a task for which monetary policy is singularly unsuitable.

Since his Eric J. Hanson lecture, delivered at the University of Alberta in January 1988,[1] Bank of Canada Governor John Crow has taken a strong and consistent position about the principles that should underlie the conduct of monetary policy in this country. Those principles, with which the Institute agrees, amount to the following:

- the proper goal of monetary policy is the establishment, and then the maintenance, of price level stability;
- this policy must be pursued on a national basis, since regionally differentiated monetary policy is not feasible;
- it is impossible for the Bank simultaneously to pursue exchange-rate and interest-rate targets while attempting to control the price level; but
- success in controlling inflation will contribute to the achievement of lower interest rates, and will not adversely affect Canada's overall international competitiveness.

Zero Inflation as a Policy Target

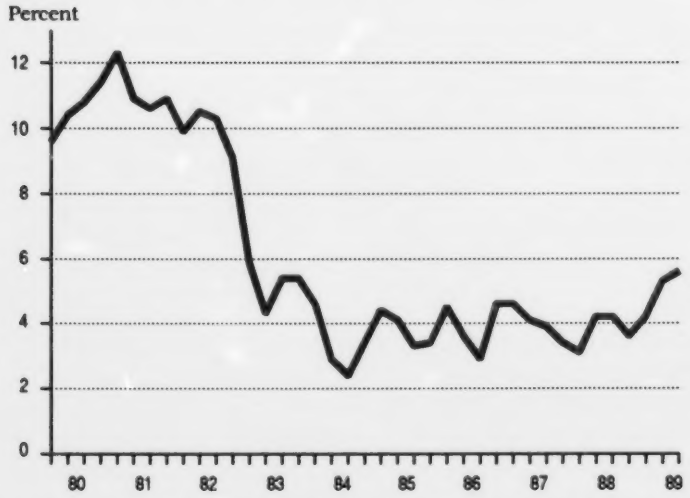
Canada's experience with inflation in the second half of the 1980s has been a good deal less unpleasant than it was in the first half of the decade, as Figure 1 shows. No one argues that

1 See John W. Crow, "The Work of Canadian Monetary Policy" (Eric J. Hanson Memorial Lecture delivered at the University of Alberta, Edmonton, Alberta, January 18, 1988. Reprinted in *Bank of Canada Review*, February 1988, pp. 3–17).

Figure 1

***Inflation in Canada, 1980–89*[a]**

(two-quarter changes at annual rates)



[a] As measured by the Implicit Price Index for Personal Expenditures.

Source: Statistics Canada, *National Income and Expenditure Accounts*.

a return to double-digit inflation is desirable, but there are many who would settle for living into the indefinite future with inflation running at its present rate of about 5 percent, rather than attempting a further significant reduction. It does not seem appropriate, however, to think of 5 percent as a low inflation rate.[2]

To begin with, a 5 percent inflation rate halves the value of money about once every 14 years — hardly a pleasant prospect for anyone retiring on a fixed pension, or even on a pension

2 For a more detailed discussion, see the essay by Peter Howitt in Richard G. Lipsey, ed., *Zero Inflation: The Goal of Price Stability* (Toronto: C.D. Howe Institute, forthcoming).

that is only partially indexed. Moreover, inflation interacts with the practice of levying income taxes on the whole return accruing to savers — including that portion of it which is simply a compensation for inflation — to put more upward pressure on borrowing costs than is commonly understood. It is simply not the case that someone who is willing to lend at 4 percent in conditions of price stability will be content with a return of 9 percent if the value of money is declining at 5 percent. If the lender is in a 50 percent income tax bracket, then a before-tax interest rate of 14 percent, not 9 percent, is needed to maintain the after-tax real rate of return on savings at 2 percent in the presence of a 5 percent inflation rate. Much criticism of the current conduct of monetary policy is aimed at the prevailing level of interest rates and the difficulties it creates for borrowers. To settle for living with the current rate of inflation would carry with it a considerable risk of making such difficulties permanent.

Ongoing inflation, even in the 5 percent range, has other, less obvious, effects on economic performance. Because firms change their prices at discrete intervals, rather than continuously, it is difficult to distinguish that component of any price change which simply reflects an inflation adjustment from that which reflects a change in underlying supply and demand conditions. It also makes the calculation of depreciation charges a nightmare. Inflation reduces the capacity of price signals to convey useful information and incentives to firms and households alike, and hence reduces the efficiency of market mechanisms. It diverts scarce skilled managerial and professional talents into the business of helping firms cope with inflation *per se*, rather than with making business decisions that would serve the welfare of their customers. And it drives firms and households alike into devoting real resources to devising schemes to minimize their holdings of such nominal assets as money, whose value inflation erodes. All of the losses

here fall as inflation falls, and the fact that economists have not yet quantified many of them does not make them trivial.

It is, of course, true that if the accounting and tax systems could be properly indexed for inflation, if all pension contracts could be fully indexed, and so on, many of these problems would be eliminated. However, virtually all current accounting practices, not to mention many legal conventions, take constancy in the value of money for granted. These arrangements proved durable even in the face of the much higher inflation rates of the late 1970s. If indexation was not widely adopted a decade ago, it will not be widely adopted now, and it is not a practical alternative to the elimination of inflation. And inflation, even at current rates, is costly. It is not entirely accidental that two of the world's most consistently successful economies in recent years, Japan and West Germany, have also had the lowest rates of inflation.

Though the phrase "zero inflation" has a precise ring to it, it is really quite vague.[3] To which price index does it refer: the Consumer Price Index (CPI), the Personal Consumption deflator, the Gross Domestic Product deflator, or what? And do any of these give a true measure of what is happening to the "cost of living" of ordinary Canadians"? These and many other indices keep track, in different ways, of the prices of different bundles of goods, and their paths do diverge from time to time. Nor can one be really sure that they are bias free. For example, to the extent that the CPI takes inadequate account of the improving quality of certain classes of goods — consumer electronic products, for example — or fails to make sufficient allowance for consumers' tendencies to substitute goods whose relative prices are falling for those that are rising, it will tend to overstate the inflation rate. And even if one had settled on the "right" price index to stabilize, it would be quite impossible to hold it constant quarter by quarter or even year by year. Zero

3 See the discussion by Pierre Fortin in ibid.

inflation only makes sense as a policy target if it is thought of as referring to an average performance over a period of years.

There are important technical questions to be answered, then, if the zero-inflation target is to be made more precise. Nevertheless, there is no doubt that the Canadian economy would be better off if the current inflation rate, as measured by any of the above indices, were closer to zero than to 5 percent. There is no reason, then, for delaying the attempt to lower the rate pending the resolution of these technical issues. They can be studied while policy is implemented. Though low inflation will bring benefits, the process of getting there carries with it risks that argue for proceeding slowly.

Reducing Inflation

Inflation is simply another name for a falling value of money. Though many factors — taxation changes, energy price shocks, and so on — can impinge on it for short and not so short periods of time, the determination of the value of money over the long term is fundamentally a matter of supply and demand.[4] If the rate of growth of the supply of money outstrips the rate of growth of the economy's demand for it at constant prices, then its value will fall — that is, those prices on average will rise. The economy's demand for money is subject to many short-term disturbances, and it is unwise to put the growth of the money supply on some predetermined path and attempt to hold it there month in and month out, regardless of circumstances. The Bank of Canada does have an obligation, which it has fulfilled in the past, to react to events such as stock market crises, and it should not tie itself down with rules that would prevent it from reacting flexibly to other unforeseeable shocks in the future. It remains true nevertheless that, on average, taking one year with another, growth in the demand for money broad-

4 See the essay by Douglas D. Purvis in ibid.

ly follows growth in real national income. Thus, if monetary policy is to be devoted to controlling the inflation rate, the rate of growth of the money supply, on one or more appropriate measures, must also — again on average and taking one year with another — be brought within certain roughly quantifiable limits and then kept there, otherwise inflation will persist.

If the Bank is to maintain a credible long-term anti-inflation stance, it must control money growth and keep it within bounds that are compatible with its long-term targets for inflation. It is important to stress that if the Bank does this, it cannot simultaneously set and pursue "desirable" target values for interest rates or exchange rates. It must simply accept the values for those variables that markets generate, given, among other things, the rate of money growth. To achieve a given value for interest rates, the Bank would have to stand ready to buy or sell securities in any amounts at a price compatible with that interest-rate target. To maintain a given value for the exchange rate, it would have to stand ready to buy foreign exchange in any amounts at that exchange rate. In each case, the purchases and sales in question would be in exchange for the Bank's monetary liabilities, which are the reserve base on which the Canadian money supply is created. Thus, if the Bank were to attempt to control either interest rates or the exchange rate, it would have to subordinate control of the money supply to that end.

The long-term determinants of interest rates in Canada are the general level of real — that is, inflation-adjusted — interest rates in the world economy, a matter over which the Canadian authorities have no influence whatsoever, and the prevailing climate of opinion about the likely course of inflation in Canada, a matter over which their influence is indirect. The Bank can nudge domestic interest rates up or down relative to the underlying value that these two factors dictate, by contracting or expanding the rate of money growth. In the short term,

however, this direct channel of influence works in an opposite direction to indirect long-term effects.

An expansionary monetary policy, other things remaining equal, pushes interest rates down a little. To the extent that it has an adverse effect on inflation expectations, however, other things will not remain equal — the longer-term consequences of such a policy will be higher, not lower, interest rates. Exactly the opposite is true of a relatively contractionary policy.

Governor Crow is correct in claiming that, to the extent that his current policy is indeed moving in the direction of lower inflation, the upward pressure it imparts to interest rates is temporary, and that its longer-term effect will be to reduce them. And the argument about the influence of monetary policy on Canada's international competitiveness by way of its effect on the exchange rate is similar. It is true that the short-term effect of contractionary monetary policy is to cause the Canadian dollar to appreciate and to impose competitive disadvantages on Canadian producers *vis-à-vis* their foreign competitors. In the longer term, however, this disadvantage is likely to be eliminated by the consequences of pursuing a disinflationary policy for wages and other costs. These will not rise as fast as they otherwise might have done, so that to the extent that the current value of the Canadian dollar may now be too high as a result of tight money, the effect will be temporary and will disappear as the domestic inflation rate is brought down.

Even so, these consequences of a contractionary monetary policy are not rendered painless by being temporary, particularly since "temporary" here refers to a period of a few quarters or even a year or two, rather than a few weeks or months. High interest rates and a high exchange rate do create problems, and in Canada these have an important regional dimension. A booming Ontario economy might be able to take a 12 1/2 percent Bank Rate and an 86 cent dollar in its stride, but it is a different matter in some parts of the prairies and in the Atlantic provinces. Even so, the Bank is right to argue that

monetary policy cannot be regionally differentiated. The minimal regulation of the Canadian financial system and its high level of regional integration, which makes such differentiation impossible, play an important role in economic efficiency. An attempt to make credit available on cheaper terms in, say, Newfoundland than in Ontario, might create a few jobs in the former province devoted to the covert recycling of credit back to central Canada, but that is all; and those jobs would probably be held by bank executives seconded from head office, not by previously unemployed Newfoundlanders.

Under a more regulated and *dirigiste* structure for the financial sector, the central allocation of credit to various regions at differential interest rates might be possible. Such a structure does not currently exist in Canada. To put it in place would require action by the federal and provincial parliaments, moreover, and not measures undertaken unilaterally by the Bank of Canada. It would then threaten to replace private-sector initiative as the main factor driving investment decisions with a process of planning by a centralized bureaucracy. None of the many countries that have experimented with such procedures has had happy experiences with them. Regional problems need to be tackled by fiscal and structural policies, while monetary policy pursues the goal of price stability for the country as a whole.

Nevertheless, since lowering inflation does have unpleasant temporary effects, and even if these are worth putting up with to gain the longer-term benefits this would bring, there seems no reason for the Bank of Canada to move toward its ultimate target so rapidly that it creates a shock effect. The case for gradualism in anti-inflation policy as a means for mitigating its costs still stands. The problem in the 1970s was not that the case for proceeding slowly was wrong. Rather, the Bank proceeded so gradually as to raise doubts about its seriousness in fighting inflation. At the moment, long-term interest rates are markedly lower than short-term rates, which suggests that

markets might believe that inflation will fall in the not too distant future. If this interpretation of the evidence is correct, it implies that the Bank's anti-inflation stance is currently credible. There is, however, a danger that this credibility might soon begin to erode, for reasons to be discussed below. Thus, the Institute's plea for gradualism should not be read as implying that the Bank's policy is currently too tight. If anything, further tightening is required in 1990 and beyond.

The Recent Record

A central bank may lay down a set of coherent policy principles, but not follow them in practice. Thus, while the rhetoric of monetary policy in Canada has been immaculate in recent years, its conduct has been less satisfactory. A particular cause for concern is the recent behavior of the growth rates of monetary aggregates.

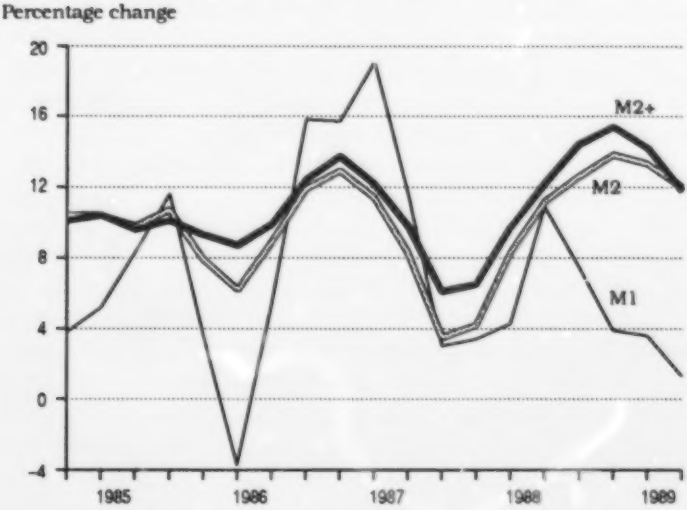
Figure 2 displays the growth rates of the three aggregates to which the Bank of Canada pays most attention: M1, M2, and M2+. M1 is the same narrow aggregate — currency plus chequable deposits with the chartered banks — on which the Bank focused during the period of monetary gradualism in the 1970s. M2 includes personal savings accounts and nonpersonal notice deposits also held by these institutions. M2+ takes account of the deposits at such institutions as trust companies, caisses populaires, and credit unions.

It is generally agreed that, whatever M1's virtues in the mid-1970s, institutional changes such as the introduction of daily interest chequing accounts — which, for technical reasons, are classified as savings accounts — have motivated individuals to shift funds out of traditional personal chequing accounts, making that aggregate too narrowly unrepresentative a measure of the private sector's liquidity to play a strategic role in the conduct of monetary policy. That is partly why the Bank abandoned monetary targeting in the early 1980s, and that is why information contained in the behavior of the broader

Figure 2

The Growth of Monetary Aggregates, 1985–89

(seasonally adjusted, at annual rates)



Source: *Bank of Canada Review*, various issues.

measures must not be ignored when the stance of monetary policy is discussed.

Statistical investigations of the historical record of money growth suggest that sustained annual rates of expansion in excess of about 3 percent for M1, and perhaps 5 percent for the broader M2 and M2+ aggregates, are not compatible with achieving and maintaining a long-term average inflation rate in the –1 to +1 percent range.

In the light of this observation, Figure 2 reveals an interesting story about the recent past, and raises uncomfortable questions about the near future. No matter which measure of money one considers, it is clear that the 12-month period from mid-1986 to mid-1987 was one of dangerous expansiveness in

monetary policy. The inflationary pressures of the 1988–89 period undoubtedly had their origins in this episode, and Canadians owe the relative mildness of these pressures to the fact that policy was reversed in mid-1987 before its effects became too deeply embedded in the economy. The following 12-month period saw much more responsible policy, but since mid-1988 the signals have been mixed. M1 growth has been erratic, but on balance has remained low. The two broader aggregates, however, have been growing at rates in excess of those achieved during the 1986–87 period, and, if sustained, those rates would make any further reductions in the inflation rate over the next two years extremely unlikely.

There are two possible interpretations of the recent behavior of these monetary aggregates. The first, optimistic, one is that M1 growth statistics provide a leading indicator of the stance of monetary policy — that further tightening was in fact achieved in 1989, and that it is first showing up in the behavior of this narrow aggregate but will become apparent later in that of the broader measures. This reading of the evidence gets a little support from the fact that the broad aggregates were growing less rapidly in the autumn of 1989 than earlier in the year. It may be the case that the potential substitution between Canada Savings Bonds (CSBs) and savings deposits at banks and other institutions has affected the growth of the broader monetary aggregates. Thus, some of the stronger M2 growth since early 1988 may reflect the fact that the very successful 1987 CSB campaign was followed by those of 1988 and 1989, in which CSBs proved relatively unpopular. A corollory of this unpopularity may well have been an increase in the public's willingnesss to hold M2 assets.

The second, pessimistic, interpretation of the data is that the processes whereby the private sector learned to economize on narrow money, which first became visible in the late 1970s, are still at work, and that recent divergences between the growth rate of M1 and those of M2 and M2+ reflect a demand-

side shift. On this reading, monetary policy has recently been unduly lax.

The behavior of Canada's holdings of foreign exchange reserves warrants some comment at this point. These grew by more than US$4 billion in 1987, by almost another US$8 billion in 1988, and continued to grow, although by a much smaller amount, in 1989. Such data have to be interpreted with care, however, since they are affected by many essentially technical influences. Nevertheless, changes of this magnitude certainly suggest that the federal government has resisted the Canadian dollar's recent appreciation, though less systematically so in 1989 than in 1988. As stated earlier, intervention in the foreign-exchange market aimed at manipulating the exchange rate makes it impossible for any central bank, over time, to form and carry through coherent plans for controlling the growth rate of money. Perhaps the ambiguities of monetary policy in recent years have had something to do with the authorities' unwillingness to let the exchange rate take its own, market-determined, course. The Bank of Canada acts on behalf of the Department of Finance in the foreign-exchange market, not as an independent agent. The behavior of foreign-exchange reserves suggests that the recent considerable public pressure to moderate monetary policy in general might have impinged on this aspect of it. If that is the case, it is a matter for regret.

Monetary Policy in 1990 and Beyond

The Institute's recommendations for the direction of monetary policy in 1990 and beyond do not depend on the correct interpretation of the Bank of Canada's current policy stance. If the recent behavior of M1 is indeed a leading indicator of monetary tightness, then that tightness should be continued. If it is not, then further stringency needs to be applied. A double-digit growth rate for M2 is not compatible with maintaining inflation at its current 5 percent level, let alone reducing it. The sooner

this aggregate's rate of expansion is reduced to a high-single-digit range and temporarily anchored there, the better. Having taken a strong public stance in favor of reducing the inflation rate, the Bank must be seen to be implementing the necessary policies if it is to maintain its credibility. A high-single-digit range for M2 growth in 1990 will not deliver price stability, but it will move things in that direction in 1991–92 as a prelude to the further contraction of money growth rates needed to eliminate inflation.

As to interest rates and the exchange rate, these must be allowed to take whatever value market forces dictate. Here, once again, the Bank's credibility is at stake. If it is publicly committed to reducing the inflation rate, it cannot afford to be seen to be tinkering with other, potentially conflicting targets at the same time. A policy of stabilizing money growth tends to increase the volatility of interest rates and exchange rates, but such volatility is a price that must be paid if visible progress is to be made in reducing inflation over the next two or three years. And, to repeat a point made earlier, the best way to reduce Canadian interest rates in the long-term is to reduce inflation. Hence, the recommendation that monetary policy should be tighter — in the sense of delivering a lower rate of money growth — ought to be read not as suggesting that interest rates be raised, but only that they be allowed to take their market-determined value.

Many people support such recommendations in principle, but argue about the wisdom of putting them into practice now. They accept that monetary policy has to be national in scope, but argue that its current stringency, let alone any further tightening, is the result of an undue concern with the problems of the economy of central Canada — particularly that of Ontario. They point to the current difficult fiscal situation, and argue that questions of the appropriate balance between fiscal and monetary policy need to be addressed. In particular, they worry that the balance between monetary and fiscal policy

needs to be shifted, with fiscal policy becoming tighter and monetary policy looser.

The Institute does not deny that the motives underlying these arguments have merit. There can be no doubt that, as is argued at much greater length elsewhere in this *Policy Review and Outlook*, fiscal policy, both federal and (in many cases) provincial, has been and continues to be disturbingly lax. Nor is there any doubt that this fact makes the Bank of Canada's task in designing and implementing monetary policy a great deal more difficult than it otherwise would be. Nevertheless, one must also recognize the Bank's difficult position, since it can hardly expect sympathetic discussion of these difficulties from governments whose fiscal policies have done so much to exacerbate them.

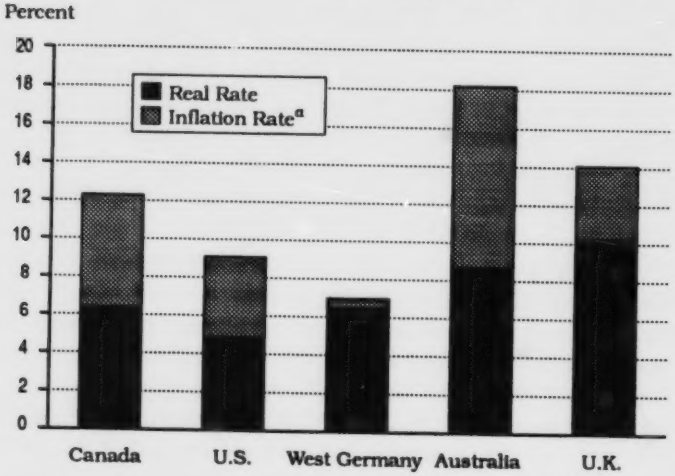
The Institute would not argue that the present levels of accumulated public debt — and the fiscal deficits that keep them rising — by themselves may be responsible for current interest-rate levels. Indeed, it is very doubtful that the direct effects are important here. As noted earlier, real interest rates — that is, interest rates net of the adjustments that markets make to allow for the inflation rates of particular countries — are first and foremost determined on a worldwide basis, and Canada's public borrowing, large though it is relative to the Canadian economy, is small in relation to the resources of the world capital market. The only country large enough to have a marked influence on world-wide interest rates by deficit reduction is the United States.

Figure 3 suggests that real (inflation-adjusted) interest rates display rather less variability across countries than do nominal rates. The figure also shows that inflation-adjusted borrowing costs are by no means the highest in Canada. (No attempt has been made here to allow for the interaction of inflation rates with the tax system.) Furthermore, the central governments of two countries — the United Kingdom and Australia — whose real interest rates are notably higher than

Figure 3

Inflationary and Real Components of Nominal Interest Rates in Selected Countries, June 1989

(three-month corporate paper rates)



[a] As measured by the change in the Consumer Price Index from the second quarter to the third quarter of 1989, at an annual rate.

Source: *The Economist*, various issues.

Canada's, are running fiscal surpluses. In both countries, the high rates are associated with uncertainties about the conduct of macroeconomic policy in general. It is possible that such concerns are also working to keep interest rates up in Canada, particularly relative to those in the United States, and that they are prompted by a fiscal policy on the verge of being out of control, but such an influence of the deficit on interest rates, if it exists, is indirect.

Regional questions warrant further comment in this context as well. It is often asserted that the Bank of Canada is unduly emphasizing the inflationary problems of Ontario in designing

monetary policy. That judgment is hard to square with the facts. To begin with, considered in isolation, Ontario's performance would justify a much tighter monetary policy than any that has been put in place or that the Institute is recommending. Moreover, every part of the country has recently experienced significant expansion, falling unemployment, and rising prices. The trouble is that this expansion has not closed pre-existing gaps in living standards — indeed, though there has been absolute improvement in the performance of the Atlantic provinces, for example, their relative position has probably deteriorated. Canada faces a complex of serious structural regional economic problems of long standing.

To attempt to ameliorate these in the short term with expansionary monetary policy would, however, create even more serious difficulties in future. An acceleration of inflation in the next couple of years would inevitably be followed by monetary policy far more stringent than that currently in place; and consider the negative impact that overdue monetary tightening in 1982 had on the economies of Canada's less prosperous regions. As was argued earlier, monetary policy is completely ill-suited to deal with regional problems. Not the least of the real harm that the deficit has done, and continues to do, is to make innovative fiscal tools unavailable for the task of addressing them.

Should monetary policy, then, wait until fiscal policy is back on track, and is again in a position to come to grips with regional problems, before attempting to achieve further gains against inflation? The Institute's answer, already implicit in much of the earlier argument in this chapter, is an unequivocal no. Only continuing evidence that fiscal deficits constitute a real threat to the longer-term conduct of policy provides a strong political incentive to address them. A slackening of monetary policy would make it easier for those who would like to ignore this unpleasant fact to continue to do so, and would, in the Institute's judgment, contribute to a worsening of an al-

ready bad situation. If anything, the Bank of Canada has occasionally been too accommodative in recent years.

There is, however, one — and only one — narrowly technical sense in which it might be appropriate for the Bank to accommodate fiscal policy in 1990, and this is worth brief discussion. The federal government expects that the Goods and Services Tax, which is due to be introduced at the beginning of 1991, to give a once-and-for-all upward boost of about 1 1/4 percent to the price level. Such an increase would, if the Bank simply did not accommodate it, put temporary but perhaps uncomfortable upward pressure on interest rates as the economy seeks to obtain the liquidity required to function smoothly at the new, higher level of prices before costs of production fall sufficiently to offset the tax increase. It would do no harm for the Bank to accommodate this effect of the tax by making extra liquidity available — on a clearly announced once-and-for-all basis, and only if it would not set off a wage-price spiral. It is important, however, for the Bank to make it clear well before the event that it will not acquiesce in attempts by any groups in the economy to avoid bearing their share of the tax by actions that might set in motion an ongoing inflationary spiral.

This chapter is easily summarized. The Institute believes that inflation in the 5 percent range is too high, and supports the Bank of Canada's view that it should be reduced. The Institute also believes that monetary policy is the appropriate tool for this task and that, in the coming year, this tool should be single-mindedly employed to accomplish it.

3

Structural Policy

Robert C. York

Responding to the Challenges of a Global Economy

The past decade has witnessed dramatic shifts in political attitudes around the globe. Political institutions and structures that only a few years ago seemed permanent are transforming, and with alarming speed. History no doubt will look back on the 1980s as a time of enlightenment: the push for greater personal freedom and democracy has led to social reform; the Berlin Wall has crumbled; the Soviet policy of *glasnost* is now five years old; the cold war has thawed. The fear of conflict and insecurity is being replaced by the hope for peace and prosperity.

Changes have also taken place in the global economy, which have created new tensions and opened the door to new opportunities in international economic relations:

- New patterns of trade, investment, and growth have shifted economic power from the United States to Japan, the European Community (EC), and the newly industrialized coun-

tries (NICs) of Asia — Hong Kong, South Korea, Singapore, and Taiwan.

- Global macroeconomic imbalances have emerged, resulting in fiscal and current account deficits in the United States, trade surpluses in Japan and West Germany, high unemployment in Europe, and debt problems and stagnation in many developing countries.
- Structural or microeconomic imbalances have created low savings rates and productivity growth in North America, and shifts in international competitiveness linked to differences in the application of new technologies and production processes.
- Markets for goods and services, and the multinational firms which provide them, are becoming increasingly globalized.
- Macroeconomic policy coordination (or, more precisely, cooperation) among the countries of the Group of Seven (G-7) is increasing, as is their macroeconomic interdependence.
- There is a growing trend toward protectionism, bilateralism, and regionalism in world trade, the consequences of which are being confronted in the Uruguay Round of multilateral trade negotiations.
- Decisions by several East European countries — most notably Hungary, Poland, Czechoslovakia, and possibly the Soviet Union itself — to move toward more market-oriented economies will have uncertain implications for the future pattern of world trade.

What does all of this mean for Canada? With globalization and macroeconomic interdependence foreign competition is now more intense, and Canadian producers are increasingly exposed to the uncertainties and opportunities of the international marketplace. The export orientation of many business activities places constraints on Canadian policies in order to fulfill international obligations, since the effects of domestic actions, more often than not, now flow across national boundaries. The changes also mean that Canada can no longer resist

adjustments to structural policies that impede its ability to compete.

Clearly, Canada requires an economic infrastructure that will enable it to respond to and become more competitive in the changing world economic environment. This involves a three-pronged strategy. First, Canada must continue to seek greater access to foreign markets, since exports continue to be a major engine of economic growth. Second, it must seek to reduce or remove structural rigidities and barriers within the domestic market. Third, public policy must place less emphasis on the short term and instead focus on the medium- and long-term prospects of enhancing Canada's competitive edge.

This chapter offers the key elements to Canada's future competitiveness. The first section discusses trade policy and the three pillars of Canada's current trade strategy: the Free Trade Agreement with the United States, the multilateral trading system under the auspices of the General Agreement on Tariffs and Trade (GATT), and enhanced cooperation among the countries of the Pacific Rim. The second section focuses on two areas of persistent domestic rigidity: agriculture and interprovincial trade. The final section addresses science and technology and human resources policy.

Trade Policy: An Outward Orientation

As global imbalances diminish in the future and as the United States' demand for imports slows, Canada will need to look increasingly to offshore markets for export growth and opportunities, and Canadian exporters will have to become more adept at winning shares in fiercely competitive world markets. An aggressive trade policy should help, by gaining for Canadian exporters increased and secure access to those markets. In so doing, it will lay a more certain foundation on which to meet future challenges. A bilateral step in that direction has already been taken through the Canada-U.S. Free Trade Agreement,

which gives Canadian exporters secure access to their largest export market. Multilateral steps are also being undertaken, through the Uruguay Round of GATT negotiations and through the pursuit of Canada's interests in the Pacific Rim.

The Free Trade Agreement One Year Later

The Canada-U.S. Free Trade Agreement has now been in operation for one full year. Is it working? While it is too early to pass final judgment on the treaty, enough time has passed to assess how it is playing out in practice.

At the outset, several points should be kept in mind:

- Adjustments are occurring not only in response to the Agreement, but also to everything else that affects economic activity and business decisions, and it is difficult to distinguish between them.
- The Agreement, as an instrument of structural policy, will have its full impact only over the longer term through productivity and real income improvements; after just one year, it is far too early to make any assessment of the macroeconomic impacts.
- Canada-U.S. trade is now more than 80 percent tariff free, so the removal of the remaining tariffs over the Agreement's ten-year horizon should not result in any dramatic short-term changes.
- The Agreement has, however, affected perceptions and expectations. In the short term, these have caused upward pressure on the exchange rate as foreigner investors view Canada as a stable place to invest.
- The Agreement is not a static arrangement; it will evolve as experience develops, just as the GATT has in the more than four decades it has been in place.
- The negative effects of the Agreement will be far more visible than its positive ones, perhaps for some time. Accordingly, the Agreement's critics will continue to blame everything bad

on it, and its supporters will remain defensive by claiming everything good for it.

Thus, this brief review of the Agreement on its first anniversary focuses on where issues about its operation have arisen.[1]

Trade in Goods

It is premature to assess the Agreement's impacts on merchandise trade flows, whatever they may be at the present time. Critics have pointed to a recent decline in the Canadian merchandise trade balance as evidence of the Agreement's failure. Trade is not a zero-sum game, however, and a trade deficit only means that imports are greater than exports. The gains from trade do not follow from the balance of trade, but from an increase in the overall volume of trade as a result of comparative advantage. In any event, two of the Agreement's results that do affect trade in goods are worth mentioning.

First, through ongoing bilateral consultations regarding market access, the two countries have agreed to accelerate the schedule of tariff eliminations for approximately 5 percent of traded goods representing about $6 billion. These tariff cuts are due to be implemented in April 1990. The original phaseout schedule and these accelerated tariff cuts mean that well over half of the now-dutiable trade will be tariff free by 1993. This is evidence that the majority of Canadian industries anticipate only modest adjustment problems; only the most tariff-sensitive sectors wish to wait and see how the Agreement will play out over the next decade.

Second, evidence — gathered through customs certificates needed to prove the country of origin — shows that only about 20 percent of those goods on which tariffs were eliminated on

1 For details of the Agreement's provisions and potential impacts, see Richard G. Lipsey and Robert C. York, *Evaluating the Free Trade Deal: A Guided Tour through the Canada-U.S. Agreement*, Policy Study 6 (Toronto: C.D. Howe Institute, 1988).

January 1, 1989, are being traded under the Agreement's provisions. The bulk of these are, in fact, still being traded under the GATT's most-favored-nation (MFN) tariff rates.

There are two possible explanations of why firms are not taking full advantage of the removal of these tariff barriers in the short term. First, many firms may feel that the added paper work, the need to learn about the Agreement's rules of origin, and the mechanics involved in filling out customs certificates of origin outweigh the reduction in tariff points. Second, for many products, tariffs have not acted as an effective barrier to bilateral trade, and thus the Agreement has not made much difference for Canadian exporters of these goods. Over the longer term, there is reason to think that, as knowledge increases and associated costs fall, and as the gap between the MFN and preferential bilateral rates increases, most firms will take advantage of the Agreement's tariff arrangements.

Temporary Entry of Business Persons

Implementation of this aspect of the Agreement is proceeding smoothly, with few difficulties having been reported by business visitors. Indeed, the Canada-U.S. Trade Commission has agreed to expand the list of professionals eligible for the entry provisions.

Investment

Recent investment activity — mergers, takeovers, and plant openings and closings — suggests that Canada's economic structure is indeed dynamic and subject to increasing change. Some of this investment activity has been linked to the Agreement and to decisions to rationalize production in the expanded market. For example, Chicago-based Stone Container Corporation's recent acquisition of Consolidated-Bathurst clearly was intended to rationalize the paper products industry and to eliminate a competitor. Most of this activity, however, is

related to domestic structural adjustments and to global micro- and macroeconomic events that are manifestly unrelated to a change in Canada-U.S. trade relations.[2] For example, the merger of two of Canada's three largest breweries was not due to the Agreement — which exempted beer from its provisions — but, rather, a result of decisions to rationalize production in the face of provincial regulations and competition. In any event, it was to be expected that the Agreement's economic impacts would fall on the investment side first, rather than on trade in goods and services, since mergers, takeovers, and acquisitions are often a less risky avenue for engaging the competition than winning market shares through export penetration.

In the near term, Canada might benefit from the negative reactions to foreign direct investment that are currently rife in the United States. Since the Agreement provides some protection for Canadians against the application of U.S. restrictions on foreign investment in that country, Canada might become the preferred location for foreign direct investment to serve the North American market. Thus, Canada could experience a much-needed investment boom, and the accompanying employment and income benefits it would bring.

Trade Disputes

The Agreement has two formal dispute settlement mechanisms: Chapter 19, which provides specifically for the review of countervailing duty and antidumping cases, and Chapter 18, which deals with disputes involving the Agreement's implementation, interpretation, and nearly anything else that is

2 For a discussion of the adjustment of Canadian business to trade liberalization, see Donald J. Daly, "The Canada-U.S. Free Trade Agreement: The Adjustment Process for Canadian-Owned Firms" (paper prepared for the Fifth International Congress of the North American Economics and Finance Association, Boulder, Col., July 21–24, 1989); and Michael J. Trebilcock et al., *Adjusting to Trade: A Comparative Perspective*, Economic Council of Canada Discussion Paper 358 (Ottawa: Economic Council of Canada, 1989).

linked to bilateral trade issues. There are also provisions for a high degree of two-way consultations. Consultative processes of this nature cannot be expected to head off all disputes, but they do have the beneficial result of educating both sides' trade officials on each other's policies and practices. This will no doubt help in future negotiations.

There has been the appearance of a sudden rush of bilateral trade disputes since the Agreement's implementation, but this phenomenon needs to be put in perspective.

First, some of these disputes — those involving wool, beer, pork, plywood, and fish, for example — have been on the agenda for years and have nothing to do with any new obligations arising from the Agreement. The Agreement is simply a new means through which this backlog of cases can be examined, and because it is new, there is also a natural desire to test its dispute settlement mechanisms. Second, as trade between the two countries grows, trade disputes can be expected to increase as well. Moreover, while there may be a public perception that disputes should be resolved instantly, in reality vested interests make it difficult to do so. As a result, trade tensions between the two countries tend to be overstated.

The litmus test of the Agreement's dispute settlement mechanisms will surely be whether or not disputes can be resolved in an impartial and business-like manner. If both countries ignore panel reports and recommendations, then after a few years the system may rightfully be deemed a failure. There should also be concern if each side chooses to interpret panel reports in its own way. And if both sides must frequently resort to retaliation to settle differences, then the mechanism surely will not be worth having. However, the Agreement's mechanisms should not be measured with a scorecard and judged by the number of checks in the win column at the end of the day. The process needs time to allow experience and precedents to develop and to allow for realistic expectations to flow from the procedures.

Chapter 18 Disputes. The provisions in Chapter 18 call for high-level consultations, which can be loose or formal, initiated by either government. Several issues have already been resolved through loose consultations, and only one case — involving west coast salmon and herring — has gone formally through the new system to a dispute panel.

The salmon and herring case, dating back to 1986, originally involved a U.S. challenge through the GATT of a Canadian policy requiring that *all* west coast salmon and herring caught in Canadian waters be landed in Canada. Canada justified this requirement by citing the need to conserve and manage its fish resources. The GATT panel found in favor of the U.S. challenge, and the Canadian government then introduced a series of new measures. In April 1989, the United States requested that a nonbinding Chapter 18 panel determine whether Canada's policies were consistent with both the GATT and the Free Trade Agreement. In October 1989, the panel reported that while it felt that Canadian conservation motives were acceptable in principle, the policies used to achieve this aim were unacceptable in practice. With this compromise ruling, both sides have now obtained their objective: better access to fish on the U.S. side and the right to conserve and manage scarce resources on the Canadian side. And, importantly, a long-standing dispute can be taken off the political agenda.

In another case, Canada has now requested that a Chapter 18 panel examine a new U.S. import restriction on lobsters from Canada that are below a minimum size. The United States justifies this restriction on the premise that imports of small Canadian lobsters impair its ability to enforce its own conservation efforts. In Canada's view, however, this is a blatant trade impediment, inconsistent with either the GATT or the Free Trade Agreement.

Chapter 19 Disputes. In the first year of the Agreement's operation, there have been a number of requests for bination-

al review panels of antidumping and countervailing duty decisions.[3] Canadian interests have initiated all but one of these reviews — evidence that the United States resorts more often to trade remedies than does Canada.

One case, involving fresh, chilled, and frozen pork, is of particular interest because of its potential relevance to future Canadian agricultural policies. Canadian private interests, along with those of the federal government, Alberta, Ontario, and Quebec, have requested a Chapter 19 panel in response to a 3.6 cent per pound U.S. countervailing duty on Canadian exports of these products. U.S. interests maintained, and a U.S. Commerce Department decision confirmed, that Canadian fresh, chilled, and frozen pork benefits from a subsidy to swine producers and that such exports threaten material injury to U.S interests. The issue revolves around whether or not the income support to Canadian swine producers is generally available or specific. If the subsidy is found to be specific and hence countervailable (as long as injury is also shown), it could result in greater remedial actions against other agricultural products.

Canada, therefore, has challenged the U.S. findings on two grounds and through two separate avenues. First, a Chapter 19 panel under the Agreement has been launched to review the decision made by the U.S. International Trade Commission and to determine if the process of subsidy determination was consistently applied. In other words, the panel will decide whether or not the determination of injury and subsidy was a correct application of U.S. countervail laws. Second, Canada has also requested that a GATT panel rule on whether or not U.S. countervail laws are themselves consistent with the GATT, and particularly with an amendment to those laws contained in the Omnibus Trade Bill of 1988. The GATT panel must decide if

3 Chapter 19 cases that have gone before binational review include raspberries, replacement parts for paving equipment (3 requests), salted codfish, pork (2 requests), steel rails (4 requests), and induction motors.

the United States is right in deeming that subsidies to swine producers automatically and fully benefit pork processors.

Future Subsidy Negotiations

The Agreement left for later the negotiation of binational rules governing the use of subsidies and trade remedies — countervailing and antidumping duties. These negotiations, which are scheduled to end in 1995, will be difficult. At this stage, however, no negotiations have taken place, as both sides are just now undertaking internal research and data gathering. It is doubtful that any serious discussions will take place before the conclusion of the Uruguay Round of GATT negotiations. The GATT is currently trying to discipline and reform multilateral subsidy practices, and whatever achievements come out of that forum will likely provide an important input to the Canada-U.S. discussions.

Canadian preparations for the upcoming negotiations should be thorough and, among other things, should include:

- clarifying both countries' intentions and objectives;
- compiling data and undertaking research into the subsidy practices of both countries to assess their potential trade effects at all levels of government; and
- consulting with the private sector and provincial governments in order to ensure that a broad spectrum of Canadian interests is represented.

The importance of these negotiations should not be underestimated. U.S. protectionism and the threat of damaging trade actions are still of prime concern to Canada. To illustrate the point, consider the decision of an offshore enterprise seeking a location to serve the North American market. A Canadian location means that most of the product would be exported; a U.S. location means that most of the output would be sold domestically. The threat of countervail and protectionism is

clearly much larger in the former case than in the latter, and the implications for plant location and, hence, investment, become readily apparent.

The GATT Negotiations

The multilateral negotiations under the auspices of the GATT — which began in Punta del Este, Uruguay, in September 1986, and are scheduled to end in Belgium in December 1990 — are at a crossroads. Heading into the final year of negotiations, it is the best of times and the worst of times for the GATT. Best, since there exists a great opportunity to revitalize the system by making progress in modernizing, updating, and removing the current uncertainties associated with world trade. Worst, since disgruntlement with the GATT's inability to deal with nontariff barriers, the growing importance of trade in services, and a proliferation of trade-distorting practices has led to protectionism, unilateralism, and regionalism.

Success in the Uruguay Round, therefore, will help to:

- preserve the multilateral trading system and encourage regional developments — such as European integration and Pacific Rim cooperation — to be outward looking;
- renew political commitment to an open trading environment;
- ensure a smooth adjustment in reducing global trade and economic imbalances and in encouraging a more even distribution and pattern of world trade, investment, and growth;
- ensure that developing countries, particularly the NICs, become more involved in the multilateral system through increased international obligations; and
- make the trading system more credible by reducing special preferences in the GATT for developed countries — for example, agricultural waivers for the United States and the EC — and by dealing with issues of importance to the developing countries — for example, the Multi-Fibre Arrangement.

During the past decade, it has become increasingly clear that the success and stability of the world trading system rely heavily on the GATT. For Canada, the existence of the Free Trade Agreement has also heightened awareness of the complementarity of the two treaties. For instance, many Canadian-U.S. trade disputes in the past year have involved practices and principles that have implications that go beyond North American borders. If the current Round of multilateral negotiations yields little, good trade relations between these two countries will become even more essential, and negotiations to further enhance Canada's security of access to the U.S. market will take on added importance.

For Canada, success in the Uruguay Round will mean wider access for its goods to the markets of the GATT's 96 other signatories; strengthened rules for settling disputes and the use of subsidies and trade remedies; and multilateral trade rules for areas not currently covered by the GATT — including services, investment and intellectual property measures, and reforms in agricultural trade practices. In specific terms, Canadian negotiators in Geneva should use this opportunity to improve Canada's access to the markets of Japan, the European Community, and the Asian NICs, now that access has been gained to the United States through the Free Trade Agreement. In the developing countries, negotiators can help find or create niches for Canadian products and, importantly, reduce special concessions and preferential treatment that erode or discriminate against Canadian exports in these markets.

Progress in the Round to Date

The Uruguay Round has now moved into its substantive and detailed phase. The impasse — on agriculture, safeguards, textiles, and intellectual property — that threatened to derail the talks at the Mid-Term Review in Montreal in December 1988 has been broken. Most, if not all, of the participating countries have tabled their positions, negotiating frameworks for all of

the groups covered in the Round have now been agreed on, and serious bargaining is just getting under way.[4]

Results have already been achieved and new provisions implemented in two areas related to the functioning of the GATT system.

First, the signatories have agreed that the GATT Secretariat will make periodic examinations of individual members' trade policies and practices. This is designed to increase the transparency of national policies and to improve adherence, discipline, and commitment to the trading system. In 1989, reviews were completed for the United States, Australia, and Morocco, while Canadian trade policy will be reviewed in 1990. This surveillance mechanism will imply a new and expanded role for the GATT in the world trading system; in particular, it will strengthen the GATT's role as an institution with a conscience (or a policing function) and not just as a body to receive complaints.

Second, new procedures for settling disputes have been in place since May 1989. These procedures set strict time limits for consultations between parties to the dispute, for undertaking investigations, and for adopting GATT panel reports. Disputes are to be resolved within a 15-month timetable, which is a vast improvement over the long-drawn-out practices of previous years.

There has, therefore, been some progress in this Round, but its success is far from assured. Fundamental differences remain in the negotiating positions of the major players — the United States, Japan, and the EC. For example, although the United States no longer demands full liberalization of trade in agricultural products, Japan and the EC have taken defensive positions. There is also an added layer of complexity as a result

4 The 15 negotiating groups are: tariffs, nontariff measures, tropical products, textiles, natural resource-based products, agriculture, GATT articles, services, safeguards, subsidies and countervailing duty measures, dispute settlement, intellectual property rights, investment, the functioning of the GATT, and Agreements and Arrangements.

of the active participation, for the first time, of the developing countries, and the differences between their objectives and those of the developed countries. The developed countries, for example, are seeking the full participation of all GATT signatories in adopting and implementing multilateral trading rules for services and for trade-related investment and intellectual property measures. But this objective collides with those of the developing countries, which prefer special and deferential treatment in these matters. The developing countries want greater access to clothing and textile markets, which the industrialized countries are reluctant to give. Therefore, it remains to be seen whether or not, in the highly charged atmosphere of multilateral negotiations, sufficient political will exists to identify the best way to achieve the widest possible market access for domestic exporters to world markets and to achieve predictability in world trading rules through a strengthened and updated GATT system.

Canada and Pacific Rim Cooperation

The idea of economic cooperation among the countries of the Pacific Rim is not new, but perhaps one whose time has come, given the difficult issues facing the multilateral system. Over the past two decades, economic cooperation, trade, and investment linkages among the Pacific Rim countries have risen dramatically, and in the past year, in particular, the level of discussions has increased markedly. This recent interest was largely ignited by a proposal for a Pacific ministerial conference made in January 1989 by Australian Prime Minister Bob Hawke, and is being given added impetus by three factors: the growth of Asian Pacific Rim exports to over 20 percent of the world total; the trend toward protectionism, bilateralism, and regionalism; and perceptions from the region of lost momentum in the GATT negotiations and the prospects of a weak outcome for the Uruguay Round.

Since the Hawke initiative, there has been a series of ministerial discussions involving Asian countries, Australia, New Zealand, Canada, and the United States.[5] The involvement of trade ministers in these discussions is symbolic and unprecedented, and shows how important trade policy in the region has become. The discussions, however, do not imply that economic integration is being contemplated. At least in the short term, the region's diversity — culturally, socially, politically, and economically — would make such an event unlikely. It has not, however, precluded the idea of fostering formal cooperation through an intergovernmental organization such as a Pacific-based OECD, which could help to facilitate and articulate the region's interests.

Canada's Objectives in the Pacific

What, then, can Canada get from these ministerial discussions and from enhanced cooperation in the region?

First, a middle economic power such as Canada should have some capacity to help bridge the disparate interests of the region and to support moves toward more outward-looking and market-based economies. This could be an important role, since Canada is not viewed with suspicion or mistrust as is, for example, Japan or the United States from the point of view of China or South Korea. Nor is Canada seen as having the power to dominate and overshadow other countries' interests in the area.

Second, until the end of the Uruguay Round in December 1990, Pacific cooperation should act to focus efforts toward achieving a more successful set of multilateral negotiations.

5 For more detail and background, see Edward H. English, *Tomorrow the Pacific* (Toronto: C.D. Howe Institute, forthcoming); Frank Holmes, ed., *Stepping Stones to Freer Trade? Canadian, Australian and New Zealand Perspectives* (Wellington, N.Z.: Victoria University Press, 1989); and Murray G. Smith, ed., *Canada, the Pacific and Global Trade* (Halifax: Institute for Research on Public Policy, 1989).

Canada and its Pacific partners should work to build collaborative strategies in areas of common interest. The countries of the region have mutual concerns and could well take steps to improve market access; to establish more precise rules for the use of subsidies and the application of countervailing duties; to liberalize trade in services, particularly for financial, tourism, construction, and professional services; and to establish some agreement on the need to protect intellectual property rights. There are also areas of disagreement that cooperation might help to overcome: trade barriers in labor-intensive manufactures — textiles and clothing — which are protected in the developed countries by the Multi-Fibre Arrangement; and the need to find middle ground in phasing out the differential status many of the region's countries enjoy as they become more highly developed.

Third, if the Uruguay Round fails to achieve a substantial liberalization of trade, greater Pacific Rim cooperation could act as an alternative means of furthering Canada's interests in the fastest growing part of the world. One possible strategy might consist of specific-issue alliances of mutual interest and a framework agreement involving conditional MFN treatment designed and initiated by the Pacific countries but open to any country willing to join. This approach is currently used in the GATT codes and could include:

- greater access to each other's markets for tropical and temperate zone agricultural goods produced in the Pacific;
- a regional subsidies code;
- greater access for textile and clothing products in each other's markets;
- a regional service-sector agreement; and
- measures concerning investment and intellectual property.[6]

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6 Edward H. English, "CANZ and Pacific Partnership," in Holmes, *Stepping Stones to Freer Trade?*, pp. 21–22.

Finally, over the medium and longer term, Canada should pursue greater trading and investment opportunities in the Pacific region for their own sake. This could also include proposals to build bilateral trade agreements. The United States has already contemplated such arrangements with Japan, South Korea, and the countries of ASEAN;[7] Canada should pursue discussions along the same lines if it wishes to avoid being left out of any such future arrangements.

Reorienting Domestic Structural Policies: Agricultural and Interprovincial Trade

Canadian trade policy is now decidedly outward looking. To derive the benefits of this orientation and export-led growth, however, domestic economic policies must also be reoriented to accommodate the opportunities and constraints of international commitments. In this environment, policies should not run against the current of what is internationally accepted. Nor should domestic policies impede the ability of Canadian businesses to compete successfully abroad. This follows at both the federal and provincial levels of government, since it is inconsistent and self-defeating for national trade policy to look outward if provincial policies look inward.

The past decade has seen a marked shift in Canadian structural policies — toward less intervention and greater market orientation. Even more could be done, however, to promote efficiency and market responsiveness and to follow through with reforms that have been left half done — for example, in transportation, financial deregulation, and privatization.[8] Two areas

7 ASEAN is an acronym for the Association of Southeast Asian Nations, which consists of Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Brunei.

8 The agenda of economic reforms initiated in the last half of the 1980s is described in detail in Edward A. Carmichael, Katie Macmillan, and Robert C. York, *Ottawa's Next Agenda*, Policy Review and Outlook, 1989 (Toronto: C.D. Howe Institute, 1989).

where little or nothing has been done are agricultural policies and interprovincial trade. These two issues are cause for concern, since both have been particularly resistant to change and will likely take some time to reform. They are also complicated by the existence of strong domestic constituencies and a federal-provincial layer of complexity. It is now time, however, to re-evaluate both in light of changes in the structure of domestic and world markets and in the international policy environment.

Canadian Agricultural Policies in a Changing World

For a variety of political, social, and economic reasons, agricultural policies will continue to be at the forefront of public policy debates both domestically and internationally. The Canadian farm sector will be under increasing pressure to accept reforms in the near to medium term because domestic policies that may have been justified in an earlier time now are coming into conflict with changing conditions in the marketplace. These changes include:

- biotechnology developsment that have increased farm productivity and yields and helped reduce and control diseases;
- shifts in consumer preferences toward higher-quality, higher-value-added products — for example, low-fat meats;
- the growing interdependence, especially with increasing environmental concerns, between the agrifood sector and the rest of the economy;
- increased international competition due to the transfer of biotechnology to developing countries;
- pressures from domestic farm subsidies in other countries and their consequent trade-distorting effects;
- the Canada-U.S. Free Trade Agreement and the future inclusion of agriculture under the auspices of the GATT; and

- the reduced ability of governments to continue financing agricultural producers in the face of fiscal restraint.

Thus, Canada must find ways to adjust and adapt its farm policies to these changed conditions. Fortunately, the prospects for the agricultural sector are not at all bleak, since changing world events provide not just challenges but opportunities as well. Liberalization of world trade, population increases, and economic growth in developing countries, for example, all provide avenues for increased Canadian farm exports.[9]

The International Dimension

Many of Canada's agricultural problems are tied to the international forum, as the above list of points indicates. Therefore, any reforms to domestic policies should await the end of the Uruguay Round of GATT negotiations — the first such Round to try to grapple with agricultural issues. While this does not preclude Canadian agricultural concerns from preparing policy responses to a range of possible outcomes, a wait-and-see approach serves Canadian interests for the following reasons:

- the political dimension is important in agriculture, and many disputes involve issues that are multilateral in nature;
- it is probably reckless for Canada to use up its bargaining leverage through unilateral action; rather, it should save the delicate tradeoffs for the multilateral forum, which promises much higher returns;
- a fair solution to the world's farm subsidy wars depends on multilateral cooperation, and any domestic subsidy reductions could result in Canada's losing shares in world markets.

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9 The world agricultural situation is explored in detail in J.C. Gilson, *World Agricultural Changes: Implications for Canada*, Policy Study 7 (Toronto: C.D. Howe Institute, 1989).

Agriculture is not now included in the GATT, which is one major reason why there has been such international controversy in this sector. As a result, there are no effective multilateral rules to govern certain aspects of trade that are distorting, such as export subsidies and GATT waivers to specific countries for specific products such as sugar quotas in the United States.

Agricultural reforms in the GATT are being considered along two broad tracks: first, a progressive reduction in income-support programs that distort trade and cost national governments substantially and, second, more effective GATT rules — which would include commitments to increase market access and to make agricultural producers more responsive to market forces. Success in the multilateral forum in disciplining agricultural trade and the practices of Canada's trading partners will greatly boost this country's own reform efforts. However, in the unfortunate event that the GATT fails to deliver, Canada will have to take a hard look at unilateral reforms, which will require a greater degree of domestic adjustment.

Domestic Agricultural Reforms

Assuming at least partial success on agricultural reform in the GATT negotiations, Canada must be prepared to accept some changes in the future. There can be no doubt that undertaking these reforms will be difficult. Special interests in this country are divided regionally and by sectors between those who primarily export (the West) and those who primarily gain from protection (Ontario and Quebec). A further complication is the plethora of federal and provincial agricultural programs. Nevertheless, Canadian farmers must be allowed to become more responsive to market signals. In general terms, this means the transformation of internal income-support measures in their present form and the re-examination of supply-management regimes.

Agricultural Subsidies. Agricultural subsidies to maintain farm incomes that are tied to production are both trade distorting and costly for governments to maintain. Oversupply and, consequently, depressed prices in world agricultural markets will no doubt recur, meaning that demands for assistance will continue. The liberalization of agricultural trade and the removal of existing income support would lead to a reduction in farm incomes. What is required, then, and what is being contemplated in the Uruguay Round, is a shift to direct income support that is decoupled — that is, not tied to the decision to produce — and therefore not trade distorting.[10] This type of support also keeps Canadians in agriculture and allows producers to react to conditions of supply and demand.

As an alternative to subsidies based on production, direct income support is not a new idea, but many farmers view payments of this sort as amounting to welfare and are reluctant to accept them. Thus, the federal government must work with the provinces to find the political will to alter farmers' attitudes, or wait until shifts in international commitments thrust such changes on the farm sector, or offer a new approach to income support. In a recent Green Paper, the Department of Agriculture hinted at a ceiling for support to avoid escalating costs and argued the need for greater cost sharing between the two levels of government.[11] In the short term, this is a sensible first step, but it would do little to solve the problem. Thus, in the absence of any new approach, the C.D. Howe Institute continues to view decoupled income support as a viable and pragmatic option to the status quo.

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10 See, for example, Kristen Allen and Katie Macmillan, eds., *U.S.-Canadian Agricultural Trade Challenges: Developing Common Approaches* (Washington, D.C.; Toronto: Resources for the Future and the C.D. Howe Institute, 1988); and William M. Miner and Dale E. Hathaway, eds., *World Agricultural Trade: Building a Consensus* (Halifax, N.S.; Washington, D.C.: Institute for Research on Public Policy and Institute for International Economics, 1989).

11 Canada, Department of Agriculture, *Growing Together: A Vision for Canada's Agri-Food Industry* (Ottawa: Supply and Services Canada, 1989).

Supply Management. Canadian supply-management regimes are currently under scrutiny in the GATT. A 1989 GATT panel report found that Canada's import restrictions on ice cream and yogurt are contrary to multilateral trade rules. Although a GATT provision (Article 11) allows Canada to impose quotas or otherwise restrain trade in primary products (for example, industrial milk), in support of domestic supply management, it apparently does not allow Canada to protect upstream products (in this case, ice cream and yogurt). Canada has argued that its inability to place import controls on these upstream products undermines measures to support supply management at the primary level. Canada has agreed to adopt the GATT report, but has decided to wait until the Uruguay Round is completed before taking actions to modify current practices. While it is probably reasonable to conclude that such programs will continue to be allowed in international fora, their scope and coverage will be greatly constrained. Thus, the federal government must evaluate ways of making these regimes more responsive to market conditions.

This will be difficult, and any attempts to change the functioning of the supply-management system will meet with strong resistance. Indeed, despite the GATT report, the federal government has restated its commitment to retain the border protection necessary to support supply-management efforts. It remains to be seen how this policy will stand up in the face of potential changes in international commitments. Moreover, there is a glaring inconsistency between vigorously pursuing liberalization of export markets on the one hand and protecting some domestic markets on the other. Internal policies are also inconsistent. For example, the government intends to exempt food from the Goods and Services Tax (GST) on the premise that such a tax is regressive, while at the same time allowing high prices to exist on eggs, dairy, and poultry products.

Box 1

Types of Interprovincial Trade Barriers

Some of the ways in which the provinces currently protect and discriminate in favor of local producers and their geographic markets are the following:

- provincial procurement policies;
- some restrictions on labor mobility;
- interprovincial trucking regulations;
- liquor distribution and marketing practices;
- product standards and regulations;
- differential tax treatment; and
- agricultural policies, including marketing boards.*

*For a complete listing of the types of barriers used in Canada, see Canada West Foundation, *The Canadian Common Market: Interprovincial Trade and International Competition* (Calgary, 1985).

Interprovincial Trade Barriers

The desire of provincial governments to erect nontariff trade barriers to enhance their economic prosperity is certainly understandable, and justified in the absence of any cooperative efforts by all provinces to reduce or eliminate such barriers (see Box 1). However, such beggar-thy-neighbor policies are harmful not only to national income but also to the competitive positions of the provinces and the country as a whole.[12]

Canada is not alone in dealing with the problem of fragmented national markets. Australia is striving to remove internal barriers, and the EC, in its current efforts to complete the common market by 1992, is also attempting to remove these barriers. For the EC, the reason for doing so lies in the tradi-

12 For a detailed discussion and quantitative assessment of the costs of internal barriers, see John Whalley and Irene Trela, *Regional Aspects of Confederation*, Royal Commission on the Economic Union and Development Prospects for Canada Collected Research Studies 68 (Toronto: University of Toronto Press, 1986).

tional gains that result from increased trade and investment linkages and from the free movement of factors of production. The income gains of a Community without internal trade barriers are estimated to be between 4.3 and 6.4 percent of the EC's gross domestic product in 1988.[13] Why, then, if a collection of 12 independent nations can see the benefits of greater integration, a federation like Canada cannot?

Why Eliminate These Barriers Now?

The desire to remove interprovincial trade barriers has been around for a long time, but the political will to pursue liberalization has been lacking. The provinces continue to view such barriers as effective means of achieving regional development goals. But the globalization of markets and the intense nature of foreign competition make market fragmentation and impediments to greater efficiency barriers that Canada and the provinces can now ill-afford. As trade-distorting measures have shifted from tariffs to nontariff barriers, the provinces' potential to affect trade policy and trade matters has increased. As a result, this has widened the scope for tension and conflict among the provinces, the federal government, and third countries. The Free Trade Agreement, as a result of which there are many instances of freer trade north-south than east-west, is providing additional impetus for these increased tensions. The existence and proliferation of internal barriers work to reduce and distort the benefits of Canada's outward-looking trade orientation. They also create rigidities that make domestic adjustments and rationalization more difficult to undertake, and this can compromise Canadian competitiveness.

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13 Paolo Cecchini, *The European Challenge 1992: The Benefits of a Single Market* (Aldershot, Hants.: Wildwood House, 1988), p. 83.

Integrating the Canadian Common Market

What are the alternative approaches to better integrating the Canadian common market? The challenge of policy is make the system work in a small open economy characterized by increasingly liberalized external trade. Any mechanism must be able to deal with shared responsibilities in an environment where they are constantly being challenged. This is illustrated by federal-provincial disagreements over tax jurisdictions — manifested most recently in the debate over the GST — and over the distribution and marketing of wine and beer. Solutions to the problem have also been hampered by the absence of rules for decisionmaking in intergovernmental matters, except, of course, for unanimity, which is difficult to achieve.

Of the various ways that have been suggested to solve the problem, five merit examination here:[14]

(i) a declaration of intent by the provinces to remove certain practices on a sector-by-sector basis;

(ii) a nonbinding agreement that would establish a timetable for the phasing out of interprovincial barriers; such an agreement could also list practices that may be exempted from its provisions;

(iii) a binding version of (ii);

(iv) an interprovincial trade commission that would regulate and oversee interprovincial trade practices;[15]

(v) an amendment to Canada's Constitution to guarantee the protection of a common market; to date, the Constitution

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14 Canada, Department of Regional Industrial Expansion, "Experiences of Other Federations and Selected Internal Organizations in Removing Trade Barriers" (Unpublished background paper for the Federal-Provincial Task Force on Investment and Barriers to Interprovincial Trade, Ottawa, 1986).

15 This was recommended by the Macdonald Commission. See Canada, Royal Commission on the Economic Union and Development Prospects for Canada, *Report*, 3v. (Ottawa: Supply and Services Canada, 1985).

has been interpreted as only ruling out tariff barriers between provinces.[16]

Regardless of which option is used, it should meet certain requirements:

- it should provide clear rules for accepted practices and exceptions;
- it should be overseen and administered by a permanent secretariat for interprovincial trade matters, which would be removed from the political reach of vested interests in the provinces and the federal government;
- it should induce the provinces to consider the trade-distorting or discriminatory nature and implications of their policies;
- it should provide for the periodic review of offending policies and practices and for negotiations to roll them back;
- it should provide an outlet for the effective and efficient resolution of provincial trade disputes;
- it should have some capacity to adopt and enforce recommendations for the removal of offending practices, including such provisions as retaliation, compensation, and appeal; and
- it should be able to react quickly to changing economic and institutional conditions and the ability of provinces to invent new trade barriers.

Using these criteria, alternative (i) would not be adequate since it contains no way to ensure that the provinces would abide by a declaration of intent. The lack of a binding commitment would also eliminate alternative (ii). Amending the Constitution, suggested in (v), could effectively tie the hands of each jurisdiction and would have a neutral impact on the balance

16 This is explained in more detail in Frank Flatters and Richard G. Lipsey, *Common Ground for the Canadian Common Market* (Montreal: Institute for Research on Public Policy, 1983).

of power between Ottawa and the provinces. It must be rejected, however, for two reasons. First, in the divisive environment surrounding negotiations on the Meech Lake Accord, getting agreement to change the Constitution may be difficult in the near term. Second, entrenching such provisions in the Constitution would make the process cumbersome to policy and less capable of dealing quickly with the changing circumstances of a dynamic economic structure. Therefore, the best bet seems to be some permutation of options (iii) and (iv).

In a practical sense, what is required is a GATT-like treaty to act as the guardian of the Canadian common market. Therefore, the provinces and the federal government should undertake consultations and negotiations to set out the broad framework of such an agreement, to see if it could be applied to the Canadian case.

Gaining the Competitive Edge: Science and Technology and Human Resources Policy

Global macroeconomic interdependence — through increased trade, investment, and policy coordination — has meant that adjustment is increasing as a global problem. The emergence of Japan and the Asian NICs as economic powers, the changing face of Eastern Europe, and the EC's steps toward integration will all affect the pattern of world trade and economic growth. In which direction, however, remains uncertain. Gaining increased market shares and product niches in these fluid times will require flexibility and stability in the domestic policy environment.

Competitiveness

To maintain and enhance global competitiveness, Canadian business and labor must be equally nimble. They must be able to accommodate change rather than resist it, and they should

tion and liberalized trade, patterns of economic development will depend on domestic endowments — human, capital, natural resources, and technology — and comparative advantage. However, more integrated and liberal world markets make a small open economy such as Canada's vulnerable to being stripped of its endowments — especially natural resources — and hence its comparative advantage. But if Canada engages in "offensive protectionism," through higher technologies and improved human skills, it can protect and enhance its comparative advantage and competitiveness.

Just what is meant by "competitiveness"? As defined by the U.S. President's Commission on Industrial Competitiveness and adopted by the Economic Council of Canada,

> competitiveness...is the degree to which [a nation] can, under free and fair market conditions, produce goods and services *that meet the test of international markets while simultaneously maintaining and expanding the real incomes of its citizens* [emphasis added]. Therefore, success in a competitive environment is not measured solely by trade figures, sales or market shares, but also by the living standards of its people. This in turn implies that the productivity with which a nation utilizes its human, capital and natural resources plays a key role in determining the competitive position over the long haul.[17]

Thus, in general terms, competitiveness depends largely on unit costs, productivity, exchange rates, and domestic policies (for example, taxation). Given these measures, how does Canada's competitiveness compare with that of its trading partners? Without going into details, suffice it to say that it has deteriorated in the past several years: labor productivity growth has been weak, hourly wage compensations have been growing, capital costs have risen, and the Canadian dollar has ap-

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17 P. Someshwar Rao and Farah Tcharkari, "Assessing Trends in Canadian Competitiveness" (Unpublished paper prepared for the Economic Council of Canada, Ottawa, March 1989), pp. 7–8.

ing, capital costs have risen, and the Canadian dollar has appreciated.[18] Therefore, in the short term, Canadians may face a significant slowdown in output and employment growth and a worsening trade balance. The magnitude of any slowdown will depend on the ability of business to rationalize and to operate at lower levels of profitability, and could be mitigated by a weaker exchange rate and domestic adjustment policies.

Over the longer term, however, Canada's competitiveness must be enhanced through improved productivity. A source of productivity improvements and growth is in the higher-technologies sector. Canada should move aggressively into the higher-value-added product and service areas to increase its market shares of technology- and skills-intensive outputs. In practical terms, this translates into adopting high-technology capital equipment and production processes and having the human capital skills to use them.

Science and Technology Policy

Historically, Canadians have depended on natural resource endowments and high resource rents for the relatively high incomes they have enjoyed. These, in turn, have encouraged the development of a manufacturing base and the financing of government initiatives in many areas. The past decade, however, has seen changes in the demand for Canada's resources, a shift largely associated with technological innovations that have led to the creation of new products and processes. New technologies have also created more intense international competition. With the rapid transfer of knowledge in the information economy, there is now less time for product developments and improvements to be implemented before market conditions change. However, these high-tech activities have also created opportunities for large rents for those who get to the market

18 For details of Canada's competitive position, see ibid.

first, with the corresponding benefit of spillovers to the domestic economy through interindustry and economic linkages. Seen in this light, science and technology will be a key element in Canada's overall strategy to gain a place in the international markets of the 1990s.

Canada's R&D Performance

Critics of Canada's science and technology efforts are fond of pointing to the relatively low levels of research and development expenditures in this country, as illustrated in Table 1. Several reasons have been put forward to explain this phenomenon:

- the Canadian economy contains a high proportion of foreign-owned enterprises, which have a lower propensity than do Canadian-owned enterprises to undertake R&D in Canada;
- Canada's small domestic market and branch-plant economy make it difficult to attain the scale economies that generate revenues for R&D;
- the relative absence of market barriers to Canada's small open economy prevents the establishment of a presence in the post-R&D process to justify a large R&D outlay; and
- Canadian businesses are structured in such a way that many of them do not do much R&D.

These points deserve some comment. The first point is widely referred to, but while it describes the direct efforts of foreign enterprises, it understates the value of foreign research efforts. This is because foreign technology is also transferred to the domestic economy through foreign-owned enterprises, embodied in production processes, product designs, capital equipment, and business practices, and through foreign employees. The second point may no longer hold: the Canada-U.S. Free Trade Agreement expands the potential market by a factor of ten. The third point is a high-tech version of the infant-

Table 1

Research and Development in 12 OECD Countries, 1986
(as a percentage of Gross Domestic Product)

	Total R&D	Industry	University	Government
United States	2.89%	2.07%	0.39%	0.34%
Japan	2.81	1.88	0.57	0.28
Sweden	2.79	1.97	0.69	0.12
West Germany	2.66	1.92	0.40	0.33
France	2.38	1.40	0.37	0.60
United Kingdom	2.33	1.47	0.32	0.46
Switzerland	2.28	1.69	0.40	0.13
Netherlands	2.06	1.16	0.47	0.38
Italy	1.47	0.85	0.28	0.35
Canada	1.35	0.68	0.32	0.32
Australia	1.14	0.39	0.30	0.44
Spain	0.48	0.28	0.08	0.12

Source: Organisation for Economic Co-operation and Development, *Science and Technology Indicators Report*, No. 3, *R&D, Production and Diffusion of Technology* (Paris, 1989).

industry argument so familiar to Canadians. While it may be valid for some industries, it is not for others. In the high-tech industries, the existence of large fixed costs, static and dynamic scale economies, and product differentiation can provide an effective entry deterrent for rival firms and products. This can replace the absence of tariff barriers to protect industries in the post-R&D process. As to the fourth point, the future structure of the economy may change somewhat through trade liberalization, and rationalization may be more conducive to grater R&D. Canadian business could also adopt a more R&D-intensive culture.

Thus, while past Canadian R&D expenditures have been somewhat low, changes in the trade policy environment and

economic conditions may alter these efforts in the future. And while relative levels are important, they are often misleading.

The Industrial Policy Debate

Any debate about science and technology policy invariably revolves around a discussion of industrial policy and targeting. The export success of Japan and some Asian NICs in high-tech industries readily comes to mind. Advocates of the industrial policy school attribute most of this success to interventionist policies by the governments of these countries to support and promote high-tech industries through measures such as import substitution, protection, and industrial subsidies. What is not always so apparent is that these industries have also been augmented by substantial foreign direct investment — especially from the United States — favorable domestic macroeconomic conditions, the existence of relatively free domestic markets, and liberalized trade in global markets for their products. Will intervention to promote high-tech efforts work in Canada?

The response to this query is often ideologically based, and rests on whether or not one feels the market mechanism or governments are better able to identify and pick high-tech winners that merit support. Although there clearly is a role for government in industrial policy, as explained below, that role should not involve engineering a specific comparative advantage for a particular industrial sector or product. Furthermore, for these policies to work in Canada would likely require a fundamental change in Canadian attitudes and practices. Canadian institutions — business, political, social, and economic — are very different from those in countries where intervention has proved successful. Most importantly, Canada is, and should remain, an open and outward-looking economy. To resort to an active industrial policy and targeting would be a departure from recent trends.

Directions for a Canadian Science and Technology Strategy

Students of science and technology policy in Canada have longed examined the issue, and intelligent views are all over the lot. No one is yet able to determine, for example, the link between R&D and economic growth, what institutions and of what size are most adept at undertaking research at all levels,[19] and the longer-term social implications of high-tech industries. One can, however, outline some general principles to guide future discussions.

The federal government should move to expand the presence and use of Canada's domestic science and technology infrastructure. It should also help to expand and enhance the rapid application and dissemination of high technology in the manufacturing and resource industries, and promote the development of leading-edge industries. It also has an important role to play where the market fails to allocate the production of goods and services efficiently. (Market failure in the high-tech industries is often related to the ability to raise sufficient capital to undertake R&D expenditures; gaps in knowledge; and the inability of private individuals or companies to appropriate returns on R&D for themselves, since the result of such activities often spills over into the public domain.)

A number of policy options follow from these general principles, including efforts to:

- create a favorable climate for R&D at all levels of research through a balanced macroeconomic policy (fiscal and monetary) where sufficient financial capital exists and at low interest costs;

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19 The three levels of R&D can be defined as (i) pure research, which has a long gestation period and involves the search for new knowledge; (ii) applied research, which involves commercial application of basic research; and (iii) development, which seeks to make improvements in product design.

- encourage the transfer of technology through foreign direct investment and trade liberalization, since both economic integration and the free exchange of knowledge in the public domain are in Canada's interest;
- promote linkages to foreign companies and countries in order to expand the scientific base;
- facilitate and promote the adoption of new technologies and provide adjustment assistance for these innovations;
- support research where market outcomes fail, particularly at the pure and applied levels, in ways that do not run afoul of international obligations (governments should rarely, if ever, support product development, since this stage normally involves the private appropriation of economic rents or the additional improvement would not have been contemplated); and
- develop and support — at least in the short term and until a better alternative is presented — Centres of Excellence for scientific research, since these may benefit from economies of agglomeration and scope and might prove to be an efficient way of utilizing Canada's scarce resources.

Human Resources Policy

Canada has had an enviable employment- creation record over the past decade, with unemployment rates falling from a peak of 12 percent in the first half of the 1980s to below 8 percent in the second half. But, as the Economic Council of Canada has noted, job opportunities are becoming more fragmented in terms of rewards, skill levels, and satisfaction.[20] The 1990s will witness additional pressures and challenges for Canadian workers because of, among other things, globalization and the continuing international division of labor, demographic shifts

20 Economic Council of Canada, *Legacies*, Twenty-Sixth Annual Review (Ottawa: Supply and Services Canada, 1989).

in Canada and abroad, and changes in technology and markets that will alter employment structures.

Statistics Canada projects that during the 1986–2000 period, the proportion of Canada's overall employment requiring high skill levels — greater than 12 years of education and training — will rise from 44 percent to 64.3 percent, while the proportion of employment requiring low skills — 9 to 12 years of education — will fall from 55.6 percent to 35 percent.[21] Unfortunately, however, the proportion of Canadians acquiring high skills training and education is declining. This trend has serious implications for Canada's ability to adjust to changing global conditions. Plants, equipment, and machinery can locate in any country, but for the most part labor skills are far less mobile. Improved human capital could, therefore, increase the efficiency, mobility, and adaptability of labor across industries and between occupations, and could promote adjustment and lessen resistance to change. In this regard, enhanced human resources complement and, indeed, are critical to Canada's efforts to gain a competitive edge and to push forward in science and technology.

Canada's Education Performance

Canadian labor productivity growth has been on a marked downward trend from 2.8 percent in 1973 to 1.0 percent in 1988.[22] Although many factors are responsible for this decline, at least part of it must be attributed to a deterioration in human capital.

Recent evidence suggests that Canada's basic education system is failing to prepare the school-aged population for the

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21 Statistics Canada, *Labour Force Survey*; and Department of Employment and Immigration, Canadian Occupational Projection System.

22 Organisation for Economic Co-operation and Development, *Surveillance of Structural Policies* (Paris, 1989), Table 1.

challenges of a modern society. In 1987, a Southam survey found that 24 percent of the population was functionally illiterate — defined as a grade nine education or less — and of this group, 17 percent were high school graduates.[23] The report of the Premier's Council of Ontario found that, among first-year students taking postsecondary education, the failure on literacy tests ranged from 20 to 40 percent.[24] The same report also contains statistics indicating that 31 percent of high school students drop out, and that less than three-quarters of the 17-year-old cohort even participate in any formal education.[25] In both dropout rates and participation rates in any formal education, Canada compares badly with its major trading partners, as Table 2 illustrates. This deterioration has occurred over a long period, so it is not at all surprising (but it is appalling) that a recent survey of Canadian businesses revealed that more than a third are experiencing human resource problems.[26] Therein lies a major problem for competitiveness: the lack of a firm foundation for human capital poses a barrier to the acquisition of the new skills and knowledge that are necessary for the development and use of higher technologies.

Human Capital Development and the Role of Government

As a medium- to longer-term proposition, the stock of human capital and the job skills mix could be augmented by basic education and further job training. Increasing the relative skill levels of Canada's workforce can lead to substantial benefits:

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23 Creative Research Group, *Literacy in Canada: A Research Report*, prepared for Southam News (Toronto, 1987).

24 Premier's Council of Ontario, *Competing in the New Global Economy*, v. 1 (Toronto: Queen's Printer for Ontario, 1989), p. 220.

25 Ibid., p. 221.

26 Bob Des Lauriers, "Functional Illiteracy in Canadian Business," *Canadian Business Review* 16 (Winter 1989): 37.

Table 2

High School Dropout Rates, and Participation Rates of 17-Year Olds in Formal Education, Various Countries
(percentage)

	Students Not Obtaining High School Diplomas	Participation Rates of 17-Year Olds in Formal Education
Canada	31%	72%
Sweden	31	78
Italy	28	70
United States	25	87
France	23	69
United Kingdom	15	53
West Germany	14	89

Source: Ontario, Premier's Council, *Competing in the New Global Economy*, v. 1 (Toronto: Queen's Printer for Ontario, 1988), p. 221.

- higher levels of labor productivity and real wages;
- the retention and attraction of high-skills industries that have high value added and hence lead to higher income levels;
- fewer income losses to the rest of the world, since the capital is embodied in the Canadian labor force, which is less mobile than other types of capital; and
- a more even distribution of domestic incomes.

Why, then, is there a role for government? Because, in a dynamic and increasingly specialized economy, individuals who choose an occupation or a specific type of training run the risk of choosing badly. Owners of physical and financial capital know the risks of changing market conditions better than do owners of human capital; thus, governments should help individuals diversify their risks. There is also a problem of adverse selection. Capital markets cannot normally distinguish between low- and high-risk individuals undertaking education

or training, and are reluctant to lend for such purposes. Government, therefore, must support and facilitate these activities.

The Way Ahead

Given that there is a role for government in the development of human capital, two broad policy areas appear to require attention: to assure the supply of human resources (a demographic challenge), and to improve the skills set of the workforce (an educational challenge).

Commentators on demographic changes have focused much of their attention on the infrastructural and social costs of Canada's greying population. Often overlooked, however, is the effect of this trend on future labor supply and productivity. As a percentage of the total population, those aged 15–24 — the age at which the majority of Canadians attain their highest level of education — have been gradually declining: from 22 percent in 1961 to 20 percent in 1988 to a projected 17 percent in 2001.[27] Thus, there will be fewer students available to acquire and use the new technologies. If Canada is to improve labor productivity in the aggregate, then those in this group need to be well endowed with skills and there need to be more of them. This implies a re-examination of Canada's immigration policy with a view to tackling this demographic challenge.

The educational challenge means improving the stock of human capital. This will require reforms to help both those who are entering the education cycle and those now largely through it. These are quite different problems, requiring different solutions. In the words of the Advisory Council on Adjustment, tackling the first problem will require

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27 Statistics Canada, *Labour Force Survey*; and Department of Employment and Immigration, Canadian Occupational Projection System.

> a thorough reassessment of the role of education, a rethinking of long-held assumptions....In view of the high level of functional illiteracy among Canadians, of the high drop-out rate, and of the prevalence of skill shortages and significant unemployment existing side by side, the Council believes that the education systems fail...and should be reviewed — and rebalanced — to attain the objectives of imparting basic knowledge, social values, and lifelong learning skills.[28]

Thus, all levels of government must work together to seek solutions to a nationally shared problem. The prime minister has called for a national task force to study the basic education system at all levels — elementary, secondary, and postsecondary — an initiative which the Institute supports.

The upgrading and acquisition of new skills and training by those people who are already in the workforce, however, is a challenge that should be tackled largely not by government but by the private sector. The role of government here should be confined to helping the unemployed get back into the labor force. The Advisory Council sensibly recommends:

- that management and workers cooperate to find ways to adjust to change;
- that firms undertake better planning of human resource needs to prepare for changing technology and market conditions, and to identify emerging skill and labor requirements in order to avoid disruption and to increase productivity and facilitate change; and
- that business foster a "training culture" as part of an overall competitive strategy to ensure greater private-sector training efforts.[29]

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28 Advisory Council on Adjustment, *Adjusting to Win* (Ottawa: Supply and Services Canada, 1989), pp. 30–31.

29 Ibid., pp. 438–445.

Conclusion

As Canada enters the 1990s, it does so at a critical stage in its efforts to enhance economic efficiency and flexibility in adapting to change. This country will need to gain a competitive edge if it is to maintain its relatively high living standards (second only to those of the United States).

Public policy, therefore, will need to foster a climate conducive to allowing business and labor to react to events in the global economy. This means continuing to focus on an outward-looking approach to the export markets that are a major engine of economic growth and prosperity. It also means addressing the problem of barriers and rigidities that impede competition in the domestic market, and it means encouraging the adoption of new technologies and upgrading Canada's human capital. The task ahead is a challenging one, no doubt requiring painful adjustments for some people and some industries in the short term. In view of the long-term employment, income, and productivity gains, however, the effort will be well worth it.

4

Social Policy

Thomas J. Courchene

The Way We Were

The conception of, and incentives within, Canada's social policy infrastructure resonate well with the economic climate of the prosperous 1960s. And well they should, given that this was the era, specifically the Pearson years, when the framework legislation for most of Canada's existing social policy system was put in place. Similarly, the range of entitlements that social policy bestows on Canadians reflects the 1960s' vulnerabilities of individuals, businesses, and regions. As Canadians look back longingly on these "good old days," in one sense we ought to congratulate ourselves on our achievements. On the economic front, resource rents and Canada's emerging manufacturing strength nestled this country comfortably into the top five of international rankings of GNP per capita. Not only was the level of Canada's domestic economic prosperity unexpectedly high and sustained, but the global economy was expanding in an orderly and tranquil fashion. Not surprisingly, therefore, Canadians utilized the cushion of resource-driven

growth (and a rapid escalation of tax rates) to mount this country's version of the modern, comprehensive welfare state.

Indeed, Canadians were so rich that social policy could be and often was designed without reference to key economic issues such as efficiency, initiative, work incentives, human capital formation, and regional adjustment. Canadians could even afford the luxury of implementing programs that were designed explicitly to frustrate natural adjustment mechanisms (regional policy generally, and the regional benefits aspects of unemployment insurance [UI] in particular, which favored "place prosperity" over "people prosperity"), to frustrate work incentives (the 100 percent tax rates on outside earnings under welfare and, after a threshold, under UI as well), and to frustrate innovation and efficiency (the provisions under health care that prevented federal cost sharing from applying to paramedics and convalescent homes, let alone "home care," the result of which was to lock Canada's health-care delivery system into high-cost and institutionalized care).

Phrased somewhat differently, the underlying philosophy was not one that was geared principally to designing social safety nets to assist in the adjustment process. Rather, it was closer to providing a social "security blanket" driven by universality considerations. Effectively, Canadians were paying homage to Daniel Bell's prediction that:

> the "revolution of rising expectations," which has been one of the chief features of western society in the past 25 years [since 1950 essentially], is being transformed into a "revolution of rising entitlements" in the next 25.[1]

Something else was occurring, however, that also served to undermine the burgeoning social policy infrastructure. Specifically, in this expansionary era, the economic and political price of additional welfare expenditures had fallen so low that it was no longer necessary to forge a consensus with respect to the

1 Daniel Bell, "The Public Household or 'Fiscal Sociology' and the Liberal Society," *The Public Interest* 37 (1974): 39.

traditional tradeoffs across liberty, equality, and economic growth. In short, commitments on the welfare state rose as commitments to it fell.[2]

Then came the economic upheaval. The 1973–74 oil shock — repeated in 1979–80 — the inflation rollercoaster, and the stagflation of the early 1980s all took their toll on the global economic system. Alongside all of this was an even more important development: the computational and telecommunications revolution, manifested first in the integration of world capital markets but now embodying the most significant cycle of Shumpeterian "creative destruction" in modern times. Not surprisingly, this economic uncertainty eventually came home to roost in terms of the philosophy underlying Canada's modern welfare state. Specifically, it revived the traditional view that there are inherent contradictions among the basic values of the democratic welfare state. As Hugh Heclo notes:

> It [the welfare state] was expensive, so expensive that costs of social policy were themselves posing a threat to individuals' economic security. It was ineffective, generally in providing high standards of service and particularly in making inroads into the gross inequalities of market-oriented societies. And it was dangerous, threatening to pursue welfare at the expense of individual liberty.[3]

As a result, industrial countries everywhere are wrestling with their social policies. On the one hand, the economic turbulence of the past decade and the ensuing adjustment and restructuring have enhanced the need for a social policy network that is both equitable and comprehensive. On the other hand, there is a growing concern that the welfare state is contributing to weakness on the economic front. Interestingly, these two aspects of this social policy dilemma appear to be

2 Hugh Heclo, "Toward a New Welfare State," in Peter Flora and H.J. Heidenheimer, eds., *The Development of Welfare States in Europe and America* (London: Transaction Books, 1984), p. 399.

3 Ibid., p. 400.

converging into a single broadside against the status quo: according to its critics, the present system is too expensive and too counterproductive in the sense that it neither facilitates economic adjustment nor provides adequate social and economic support for those most in need. This should not be surprising, since the philosophical underpinnings of the Canadian welfare system were driven by universality and security rather than by a focus on either inequality or adjustment.

A final introductory note: as the free trade debate made evident, Canadians are proud of their postwar accomplishments on the social policy front. And justifiably so. Given the fiscal and economic cushion of the 1950s and 1960s, it was entirely natural and appropriate for Canadians and their governments to have mounted a generous and comprehensive social policy network. Moreover, if this buoyancy on the economic front still prevailed today, there would be few pressures for social policy reform. Unhappily, this is not the case. Therefore, whereas the 1960s' cushion of economic growth facilitated the deployment of a comprehensive social infrastructure, the task of the 1990s will be to rationalize this network — to reintegrate social and economic policies so that they contribute to, rather than inhibit, adjustment and competitiveness, and to reorient the system to accommodate the altered challenges and needs facing Canadians. The remainder of this chapter is devoted to an elaboration of what such a system might look like.[4]

A Triad of Challenges

The Fiscal Challenge

Social programs are already reeling under the fiscal challenge, and the worst is probably yet to come. With somewhere in the

4 For a more comprehensive discussion of these challenges and tradeoffs, see Thomas J. Courchene, *Social Policy in the 1990s: Agenda for Reform*, Policy Study 3 (Toronto: C.D. Howe Institute, 1987).

vicinity of $100 billion in the overall social envelope, it is hardly surprising that the deficits and debt servicing are "crowding out" social programs. At the federal level, this is reflected in program rationalization (Old Age Security [OAS] and family allowance "clawbacks" and UI restructuring), in reneging on commitments (day care) and in paring back federal-provincial transfers. It is this last category that, in my view, is poised for the next big fiscal "hit", probably as early as the 1990 budget.

Ultimately, however, it is at the provincial level where the fiscal pressure on social policy will be greatest. Even without cutbacks in federal transfers, the provinces face tough choices. For example, health-care expenditures now account for at least one-third of provincial expenditure dollars and are threatening to rise under the combined pressures of an aging economy and increasingly expensive diagnostic and treatment technologies. Given that medicare has a potent electoral constituency, the net effect is that health care is now crowding out other social programs — postsecondary education, for example — which matter less in voters' minds.

As if these were not sufficient challenges in their own right, the provinces' fiscal positions are under increasing pressure as as a result of various federal initiatives. For example, the OAS and family allowance clawbacks reduce the provinces' income tax revenues, the UI cutbacks will force some former UI recipients onto provincial welfare roles, the abandonment of the federal commitment to day care leaves the provinces with the responsibility of managing builtup expectations in this area, and so on. The ongoing paring of Established Programs Financing (EPF) transfers adds to the provinces' dilemma: they must choose among borrowing to offset these reductions in transfers, cutting expenditures, raising taxes, redesigning these programs, or, most likely, some combination of such options. Complicating all of this is the fact that the proposed Goods and Services Tax (GST) is invading what the provinces believe is their tax base. To the extent that this reduces provincial fiscal

flexibility — and it surely will — it adds a further dimension to the pressures facing the provinces on the social front.

The fallout of this fiscal challenge is likely to have quite profound implications for social policy.

First, Canada will become more decentralized. As Ottawa pares back transfers and, more generally, loads greater revenue-raising responsibility onto the provinces, the provincial share of overall taxation will, perforce, rise.

Second, decentralization of another sort is also likely. Ottawa's "moral authority" to call the shots on many social programs will diminish if and as it progressively abdicates its funding responsibility. (This issue is broached in more detail in a later section of this chapter.)

Third, if Ottawa presses ahead with a "federal-only" version of the GST, this may trigger a scramble by the provinces to find alternative ways to maneuver on the revenue-raising front. One result may be that the provinces will want greater flexibility in terms of the personal income tax (PIT) system.[5] Currently, the three prairie provinces have been allowed, on an experimental basis, the freedom to mount "flat taxes" on taxable income as part of the tax collection agreements. Most provinces also desire the flexibility to move from the current "tax-on-tax" approach to a "tax-on-base" approach (where the provinces could levy their own rate and bracket structures against the common tax base, as distinct from the present system where they are required to levy a single tax rate — for example, 52 percent for Ontario — against federal tax payable). One could argue that if the provinces acquired an enhanced ability to control key parameters of the PIT (through, say, a tax-on-base approach), this would permit them to follow Quebec's lead in integrating the welfare system and the PIT system and, in effect, create a negative income tax. This aside, the point at issue is that some provinces might perceive a federal-only GST to be so constrain-

5 See Thomas J. Courchene and Arthur E. Stewart, "Personal Income Taxation," in a Canadian Tax Foundation conference volume on professional finances (forthcoming).

ing that they might want to emulate Quebec and "go it alone" on the PIT, particularly if Ottawa terminates the flat-tax experiment. Happily, however, Ottawa now seems prepared to consider a GST tax collection system that the provinces would run. This should serve not only to minimize GST compliance costs, but also to preserve the PIT tax collection agreements.

The Economic Challenge

The economic challenge to social policy involves coming to grips with the realities of the new world economic order. In the current global environment, the rewards will go to those countries that can transfer resources to sunrise industries. The resulting challenge to social policy is twofold:

- to ensure that the incentives within the social policy network encourage, rather than inhibit, this required adjustment on the economic front; and
- to ensure that the social safety net evolves in a manner that reflects the changing needs of citizens as they themselves adapt to the new economic order.

The Sociodemographic Challenge

The essence of the third challenge is that the needs of the individuals and families that are at risk in the 1990s do not square well with the entitlements that are embodied in the existing social policy infrastructure. Single-parent families (day care), flexible work schedules, skills obsolescence, and population aging on the one hand, and flexible production and the increasing knowledge intensiveness of business on the other, interact in a way that requires a wholesale reorientation of social policy goals. Immediately, however, one runs up against the fiscal challenge: these new needs cannot be accommodated

without some paring back of existing entitlements. This is the first aspect of the sociodemographic challenge.

The second is more daunting. Increasingly, the evidence is pointing in the direction of enhanced returns to capital, both physical and human. In terms of the human capital or skills dimension, this is manifesting itself in the so-called disappearing middle class. As Peter Drucker puts it, in a U.S. context, "it is not the...economy that is being de-industrialized, it is the...labor force."[6] Thus, the whole process of human capital formation or knowledge intensiveness is challenging Canadians on two fronts. The first is that overall levels of human capital are increasingly important to ensuring that Canada remains competitive globally. The second is that differential access to avenues for skills and knowledge enhancement is emerging as the dominant determinant of economic inequality, even to the point of threatening to generate a permanent "economic underclass." Cast in operational terms, the emerging priority is to ensure that all young Canadians have equal opportunities to access the full spectrum of the educational system, defined broadly. In turn, this will require the transfer of additional resources and opportunities to lower-income families. But money by itself is not enough. Ensuring full opportunities for both women and children involves both new approaches to child care and flexible arrangements for interactions between the family and the labor market.

A Triad of Tradeoffs

Adjustment versus Entrenchment

In addressing these challenges, social policy architects must confront three generic tradeoffs that underlie almost all Canadian policy areas — adjustment *versus* entrenchment (or

6 Peter Drucker, "The Changed World Economy," *Foreign Affairs* 64 (Spring 1986): 8.

flexibility *versus* entitlements, or universality *versus* targeting), private sector *versus* public sector, and centralization *versus* decentralization. It seems clear that, in terms of these tradeoffs, social policy necessarily evolve toward adjustment and flexibility, toward enhanced private-sector participation and, with a few important exceptions, toward greater decentralization.

Dealing with the first of these, it is important to recognize that there is no security (economic, social, or otherwise) in an economy that fails to adjust. Therefore, the essence of this tradeoff, is short term, and the issue becomes one of integrating social and economic imperatives in ways that conform with Canadians' accepted views of equity. It is undoubtedly the case that, on occasion, this will involve the gradual erosion — on the basis of ability to pay — of perceived entitlements. The most obvious case here is the gradual rollback of family allowances and their replacement with refundable child tax credits. In 1978, the Liberal government rolled back the family allowance from $25.68 to $20.00, and replaced the difference by an annual refundable child tax credit of $200. (At annual rates, the value of this family allowance cutback was roughly $67, or one-third of the $200 refundable tax credit that took its place). Since then, the refundable child tax credit has risen quite dramatically. In the 1989 federal budget, Finance Minister Michael Wilson went the full distance and clawed back the entire family allowance for upper-income families.

Taken together, this shift from family allowances to refundable child tax credits represents one of the most progressive initiatives anywhere on the social policy front, and it is fair to say that it is recognized as such in international social policy circles. One can still argue that even greater resources need to be transferred to low-income families, but the essential point is that an appropriate delivery system has been put in place. "Universalists" may well decry this clawback as an erosion of Canada's social fabric. The question that they should be required to address, however, is whether they would prefer, say, a tripled family allowance without full clawback and the re-

moval of the refundable child tax credit, because this is, in effect, the nature of the evolution of the child benefits package.

Another area where universality has recently come under attack is in the taxing back of OAS payments for high-income elderly. The fact is that when a couple passes the 65-year threshold, the tax system bestows a "gift" on them in the order of $5,000–6,000 regardless of their income bracket.[7] Indeed, this gift rises slightly for high-income Canadians. Given that the tax system itself — through pension-contribution/RRSP deductibility and tax deferral) plays a major role in creating upper-income elderly, there is no distributional tenet that can be called on to justify yet another massive subsidy. In this framework, a convincing argument can be made that the clawback of the OAS is only a halfway measure: ability-to-pay criteria, let alone the fiscal challenge, would also argue for phasing out the age and pension-income credits as well, with some of the savings targeted to the elderly poor.

In more general terms, social policy must evolve toward a consolidated framework policy that, on the one hand, coordinates all flows to lower-income Canadians to ensure that the resulting tax rates in the transition from welfare to work are not prohibitive and, on the other hand, provides sufficient flexibility so that those caught in this unfortunate bind not only have adequate income but have the freedom and encouragement to channel their initiative in ways that benefit both their own, and society's, longer-term income prospects. Far too many social policy initiatives now in place embody incentives

7 See Thomas J. Courchene, "Tax Reform: The Impact on Individuals," in Edward A. Carmichael, ed., *Tax Reform: Perspectives on the While Paper*, Policy Study 4 (Toronto: C.D. Howe Institute, 1988), pp. 11–48. Some readers may challenge the notion that the transfer system as it applies to the elderly is a "gift," since the OAS component was specifically earmarked as a special income tax between 1953 and 1975 and, thereafter, presumably folded into the general system of personal income taxation. In my view, this was just another component of the intergenerational transfer system, and not in the nature of an intergenerational contractual scheme. If it were, the implications would be peculiar indeed: last generation's high-income earners (that is, high taxpayers) would be eligible for higher levels of OAS!

that drive recipients to actions that may provide short-term benefits but are clearly not in their, or society's, longer-term interests. Moreover, in the context of this flexible, coordinated approach, universality of individual programs ceases to be of much relevance. What matters here is getting the overall parameters of the *system* appropriate — that one or more individual programs may be "universal" is relatively unimportant compared with the way in which the overall interactive system influences recipients' income levels, options, and behavior.

Private Sector versus Public Sector

The second tradeoff relates to the public-sector/private-sector dichotomy. While some of the luster has worn off, privatization — defined as the selling of commercial Crown corporations, such as Air Canada and British Telecom — has been the order of the day in most industrialized countries. But this is too narrow a definition of the public/private tradeoff. Frequently more relevant to social policy are the other aspects of privatization:

- *privatizing the financing* of a service which continues to be produced by the public sector (e.g., tuition fees, and various charges for public services)
- *privatizing the production* of a service which continues to be financed by taxation (contracting out and the private-sector participation in training to be financed out of UI premiums)
- *liberalization*, meaning a relaxing of any statutory monopolies or licensing arrangements which prevent private sector firms from entering markets previously exclusively supplied by the public sector.[8]

My comments on privatization as it relates to social policy are limited to two rather general points. First, privatization, particularly in the broad sense, is not only alive and well but has been given added impetus by the triad of social policy chal-

8 David Heald, "Privatization: Analyzing Its Appeal and Limitations," *Fiscal Studies* 5 (February 1984): 38–39.

lenges and by the adjustment *versus* entrenchment tradeoff. The social policy concern here is that this process not violate generally accepted canons of equity.

Second, across time and across countries, virtually every good and service has been produced both publicly and privately. This said, however, there have been some important trends in the conception and evolution of the state's role in social policy. Once relegated to providing collective goods such as defense, justice, research, and culture, the state is now in the forefront of providing private consumption and, in particular, household consumption. In the recent debate over child care, the issue was — in part, at least — whether the state, rather than the family, has the comparative advantage in the provision of day care: the fact that day care would be largely publicly funded was already decided. Some of this reflects the fact that the state has come to be viewed as the leader in breaking new ground in social policy — maternity benefits for the workforce, equal pay for work of equal value. Given, however, that there are limits on the public pursestrings and, indeed, on the ability of governments to manage an increasing portfolio of activities, these additional social policy roles undertaken by the state are, intriguingly, leading to the "privatization" of many traditional collective goods.[9] There are, of course, other rationales for privatization, but in the face of the fiscal challenge one should not downplay the resource reallocation potential that privatization provides, defined both in its narrow and broad sense, for enhancing the role of the state in new social policy initiatives.

Centralization versus Decentralization

As alluded to earlier, efforts directed toward fiscal trimming and revenue enhancement at the federal level are likely to trig-

9 See Assar Lindbeck, "Limits to the Welfare State," *Challenge* (January-February 1986), pp. 31-36.

ger an increase in decentralization in terms both of the percentage of taxes collected at the provincial level and the ability of the provinces to exercise control over their social programs.

In other important areas, however, greater centralization is likely to be the order of the day. Postsecondary education is a good example. The provinces' approach to the triad of access/funding/quality has largely been to guarantee access, to pare funding, and to hope that quality is maintained. At some point, however, quality will be impaired. In other words, the provinces are approaching postsecondary education largely in "social policy" terms, whereas human capital formation and knowledge increasingly are at the cutting edge of international competitiveness. Ottawa will likely have to step into this breach and emphasize those aspects of higher education that underpin Canada's ability to penetrate foreign markets.

This completes the review of the challenges and tradeoffs facing social policy. The remainder of the chapter deals with two broad issues: the first relates largely to process — that is, competitive federalism — with examples drawn from health care; the second, more substantive, issue focuses on what I refer to as the "intergenerational entitlements warp."

Competitive Federalism in Action: Health Care

No doubt many Canadians will take a dim view of provincial experimentation in areas that are viewed as "sacred trusts." It is important to recognize, however, that what is occurring here is the application of the economic theory of federalism. One of the principal advantages of a federal system is that it introduces into the government sphere some of the flexibility and competition that characterizes the operations of decentralized markets. The end result of this innovation and experimentation across jurisdictions in the production and financing of public goods and services will surely be that innovations that

prove to be superior will be adopted by all jurisdictions. The fiscal challenge will ensure this. Should one be tempted to downplay the significance of such provincial experimentation, it is instructive to recall that Canada's current health-care system owes a great deal to the pioneering efforts of Saskatchewan. That was more than two decades ago, however, and there is now a need to redesign the system to meet the changing nature of the underlying challenges.

A brief elaboration of the range of initiatives in the health-care area will serve to illustrate the operations of competitive federalism.

In terms, first, of physician payment mechanisms, Quebec now has close to 200 *Centres locaux de service communautaires* (CLSCs), which are community run and where physicians are retained on a salaried, not fee-for-service, basis. Ontario now has roughly 60 Health Services Organizations (HSOs), again on a salaried basis, and the province recently announced its first capitation program in the Toronto area (Sault Ste. Marie is the site of an earlier program). A second area where some innovative province will surely legislate in the near future is the relationship between doctors and hospitals. Effectively, the incentives (or, rather, the lack thereof) are such that, in economic terms, doctors are encouraged to view hospitals as a valuable *free* input to their earning capacity; they therefore have an incentive for increasing, not decreasing, the volume of services hospitals provide. Physician access to hospitals is, in effect, rationed, with the result that there is a stream of income or rents, some aspect of which ought to be alienable on both efficiency and equity grounds. Given the financial plight of hospitals, it is surprising that some auction process or "user fee" has not yet emerged. It will, somewhere.

On the institutional side, attention has been directed to high-profile developments such as the "privatization" of the management of a few hospitals in Ontario and Alberta. New Brunswick's "extramural" hospital — patterned after New Zea-

land's experience — where patients, whenever possible, are treated in their homes, has also made national headlines. Not only are the savings here very substantial, but patients appear to much prefer this general approach. Such developments, however, are only the tip of the iceberg. Many other innovative approaches are being considered and undertaken that aim to match alternative institutional arrangements more closely to client needs. Where the client group is the elderly, the line between health care and social policy is, appropriately, blurring. Many provinces are now moving away from high-cost institutional approaches and toward initiatives such as compensating extended families for keeping the elderly in their homes, at great savings to the public purse.

Two other areas merit attention because, unlike the above examples, which essentially operate at the margin — albeit in the right direction — they have the potential for somewhat more dramatic changes.

The first of these is the influence of the technology and information revolution. I shall focus very narrowly here only on the role of "smart cards," a generic term for the ability to access a patient's full medical and drug history, whether this information is stored centrally or carried with the patient in the form of a sophisticated magnetic card. Alberta is reasonably well advanced here, Saskatchewan has introduced such a system for its drug plan, and Ontario, now that it has abolished premiums and is moving toward a separate "identifier" for every citizen, is investing substantial resources into researching the alternative options available. It is clear that the manner and nature of information flows within the system will alter the system itself. In the limit, full information would permit the monitoring of both physician practice and patient outcomes, facilitate payment systems, greatly facilitate health policy research (in Ontario, for example, such research has been stifled because that province's health insurance plan is essentially a payments system and not amenable to research), and benefit

patients in that the availability of their medical histories will help ensure appropriate medical or drug treatments. Indeed, "outreach" medicine becomes eminently possible. It is not difficult to envision a paramedic visiting a senior citizen's home and, on discovering an irregularity, feeding this information, along with the patient's smart card, into the system. The limits here are more in the nature of Charter of Rights and privacy issues, not technological ones.

The second really substantive change is the gradual emergence of the consumer as an important player in the health-care system.[10] Until now, medicare has been a "top-down" system — that is, funders, provoviders, and institutions effectively have driven the system. More and more, however, the system is being driven from the bottom up. Quebec's community-run CLSCs are paving the way here: they integrate health and social welfare professionals and they tend toward deinstitutionalization and demedicalization. This approach is beginning to emerge in Ontario as well. The day is probably not too far off when this will filter up through the bureaucracy so that, for example, the payments aspects of both the current departments of health and community and social services will fall into one department and the health-promotion aspects will be integrated with social services.

Finally, some provinces — for example, Alberta — are now providing their citizens with statements of the dollar value of health services consumed. Quebec has hinted that it will go further and register this value as a taxable benefit on that province's equivalent of a T4 slip. Initially, this will be for information purposes only, but the possibility clearly exists that

10 The consumer has always had an important role to play in the system in the sense of being able to access services at no personal cost, apart from the odd user fee that appeared from time to time. The result of this approach has been to tilt the balance in terms of curative rather than preventative medicine and to instill consumer expectations that any and all new technologies are available as a right and, of course, at no cost. This section, however, is concerned with the role of the consumer in the evolution of the structure of the health-care system.

Quebec will follow the recommendations of the Gobeil Report and the Ontario Economic Council to link health-care financing with the income tax system. For example, the Gobeil Report argues that the first $2,000 of medical services in any year should be included as part of a family's taxable income. Families with low incomes would pay little or nothing, but a taxpayer who pays the top marginal tax in Quebec (27 percent) would see his or her taxes rise by $540 per year (that is, 27 percent of $2,000).[11] Were any version of this to occur, the result would be to ensure that consumers would play a more meaningful role in the evolution of the health-care system.

The federal government has an important role to play in all this, but it is largely along the lines of ensuring that this experimentation respects "national" concerns such as universal access and portability.

"Consuming Our Children": The Intergenerational Entitlements Warp

A recent article in *Forbes* magazine, entitled "Consuming Our Children?", repeats Senator Daniel Moynihan's assertion that "the United States has become the first society in history in which the poorest group in society are the children, not the aged." Moynihan may or may not have his history right, but what is important is that, increasingly, this is also an apt description of Canada as well. The article goes on to note:

> Because social security was labelled an entitlement, with people paying into the fund and drawing from it after retirement, retirees came to believe it was just their own money

11 See Paul Gobeil, *Rapports*, Groupe de travail sur la révision des fonctions et des organisations gouvernementales (Québec: Gouvernement du Québec, 1986); and Ontario Economic Council, *Issues and Alternatives 1976* (Toronto: Ontario Economic Council, 1976).

> they were getting back. Not so. Today's retirees...will collect between 2.5 and 4 times as much as they contributed, after adjusting for the interest they would have earned had they invested it themselves....By contrast, today's 25 year old will be lucky to get back 98 cents per $1 paid in.[12]

The argument that the elderly "bought" the existing transfer arrangements is also being used in the current Canadian context against the federal government's recent clawbacks. However, the above arithmetic holds with even more force in this country. For example, the Canada Pension Plan (CPP) was intentionally designed to be only partially funded; thus, the current projections are that CPP contributions will have to triple over the next few decades in order for future retirees to collect the *existing* level of benefits (where both contributions and benefits are defined in terms of constant dollars).

This comment should not be interpreted as a wholesale attack on social policy as it applies to the elderly. While it is, admittedly, an attack on the notion of entitlements regardless of income, it is also an argument for *preserving* a generous social safety net for golden agers and, indeed, *increasing* it for those in need. In brief, the argument goes as follows.

Tomorrow's elderly will be far more numerous in both absolute and relative terms than today's, and an increasing proportion will be counted among the upper-income class. Think of the retirement savings implications of being able to use tax shelters and to defer $15,000 per year (in real terms) over a lifetime, as will be possible under the new RRSP/pension rules.

Income support for the elderly is essentially an intergenerational transfer (this was surely true in the 1960s and 1970s; however, as larger segments of the elderly climb into the upper-income class, an increasing proportion of the transfer will occur *among* the golden agers). Thus, the next generation of working

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12 Subrata Chakravarty and Katherine Wiseman, "Consuming Our Children?" *Forbes*, November 14, 1988, p. 225.

Canadians will bear a very substantial tax burden, a burden made considerably worse by the debt overhang resulting from the current bout of fiscal profligacy. Milton Friedman's view is that the next generation will simply renege on this implicit intergenerational social contract.[13]

In order to minimize this possibility, it is vital to confront the current reality facing the new generation of working Canadians. Recent research indicates that over the 1981–86 period, there was a downward shift in the relative distribution of wages paid to workers aged 16–24.[14] This shift was widespread, occurring in all regions, industrial sectors, occupational groups, and levels of education. Although less dramatic, this pattern also held for 25–34-year-olds over the same period. Anecdotal evidence also points toward the vanishing middle class. Together, these imply a much wider distributional inequality *within cohorts* than has heretofore been the case. This tendency toward a bipodal distribution is being exacerbated by the intergenerational tax-transfer system. As noted above, the upper-income group will, among other things, take full advantage of the new RRSP limits. The underclass is still saddled with the fact that, in Ontario for example, full working-life contributions to the CPP (with no other savings) mean roughly $200 per year in income beyond that which no CPP would deliver.[15] It would appear, therefore, that the inequality inherent in today's new labor force entrants is likely to be exaggerated as they become retirees.

This suggests that income distribution — or, rather, income inequality — will emerge as a key socio-economic issue in the near future. Although this issue can and should be addressed by a more appropriate tax-transfer system, the transfer system

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13 Milton Friedman, "Why Liberalism Is Now Obsolete," *Forbes*, December 12, 1988, pp. 161–176.

14 See J. Miles, C. Picot, and T. Wannell, "The Changing Wage Distribution of Jobs: 1981–1986," *The Labour Force* (October 1988), pp. 85–138.

15 See Courchene, *Social Policy in the 1990s*.

as such only attacks the symptoms of the problem, not the root cause.

Increasingly, the root cause lies in Canada's failings in terms of human capital formation. The evidence that the education system is failing Canada's youth is confirmed time and again in international and comparative studies. As a result, almost every government and every national institution has plans to research and investigate this whole area. My best guess is that nothing much will come of this unless these enquiries recognize that the entire educational structure is not only elitist but driven by vested interests, none of which has much to do with ensuring that Canadians are prepared to compete in a knowledge- and skills-intensive global economy. This is a harsh indictment requiring some elaboration.

The Human Capital System

Scarcely a day goes by without some announcement of a plant closing, a restructuring, a reorganization involving layoffs of both blue- and white-collar workers, or a series of temporary layoffs in the real sector of the economy. This Schumpeterian process of "creative destruction," driven by global competition, has come to be accepted as the norm, even though it can exact a substantial toll on those directly affected. Throughout all of this, the educational system emerges unscathed. True, funding growth has slowed a bit; but when a major university reacts by actually chopping a program, this makes international news. The point is simply that the incentives impinging on the system are such that there are no rewards and, hence, few pressures for meaningful adjustment.

Some of these inappropriate incentives are internal to the educational system. For example, much has been written about striking down discrimination of all sorts and the Charter of Rights and Freedoms is playing a major role here. Yet, one of the system's most pernicious arrangements is the intergenera-

tional discrimination inherent in tenure (or in seniority in the civil service). Far too many generations of fully qualified Canadians have been kept out of university posts and the end is not yet in sight. One could mount an effective argument that, with the Charter now in place, tenure is simply an *economic* (income-security) provision. Ironically, however, the Charter is now being used to attempt to extend tenure *beyond* the working lifetime — that is, to ensure that there is no mandatory retirement even for those whose jobs have already been guaranteed for 35 years, thus effectively shutting out still more generations from university positions.

Incentive problems are not all internal to the education establishment. Some are government imposed, a prime example of which relates to the multitude of problems submerged in the tuition-fee issue. Setting aside their level for the moment, the distribution of fees across disciplines is outrageous in terms of any of the accepted canons of public finance, let alone equity.

The rationale for subsidizing education is, in large measure, that the benefits of an educated citizenry accrue to society as a whole, as well as to the individual. However, the more that the benefits of an education are appropriable in terms of securing or guaranteeing a future income stream, the smaller the subsidy ought to be. Current practice in Canada's universities is exactly the opposite.

Precise numbers are difficult to come by, but whatever the subsidy is to general arts students, it is several thousand dollars more for medical and dental students. Even if the subsidies were identical, tuition fees ought to be much higher for medical students than for general arts students. Indeed, there is precious little rationale at all for subsidizing tuition fees for medical students. The annual admission procedures for medical schools are a spectacle to behold. The medical admissions committee, typically composed of leading community mer ers in addition to medical professionals within and without the university, in effect auction off (or, rather, ration) the right to earn at least $100,000 a year, and for this the "annointed" are

required to cough up an extra $500 or so in tuition fees. To make matters worse, there are already too many doctors!

The appropriate solution is to raise tuition fees substantially, particularly for medicine and dentistry but for other professional programs as well, relative to fees in general programs. However, these latter fees are also too low: indeed, as a proportion of university operating costs, tuition fees appear to have fallen to approximately half the ratio of 15 years ago.[16] To ensure that, as a result, income does not become an important determinant, the rise in fees should be accompanied by an expanded loan and bursary program, with the former preferably based on a contingent repayment system.

One way to accomplish this, and also to facilitate university restructuring, is to convert the existing federal contribution to the provinces for postsecondary education into a system of tuition vouchers. Universities obviously would have to raise tuition fees in order to capture the full value of the vouchers. Some provinces might wish to take offsetting steps to counter the impact of these federal vouchers. In general, however, the result should be a university system competing on both price and quality in response to student demand.

There is an additional value associated with a tuition voucher system — namely, to move a hidden subsidy out in the open. Henceforth, it will be clearly evident that the future "elites" of the country are being subsidized to the tune of many thousands of dollars a year, while high school dropouts increasingly are channeled into low-paying service jobs (the so-called McJobs sector) or remain chronically unemployed. Herein lies much the problem of the underclass and, as well, the manner in which the overall tax-transfer system feeds the emerging societal inequality. Several observations are appropriate here.

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16 Arthur J.R. Smith, "Ontario Universities: Current Issues," in D.W. Conklin and T.J. Courchene, eds., *Ontario Universities: Access, Operations and Funding* (Toronto: Ontario Economic Council, 1983), pp. 409–426.

The obvious first point is that if society is intent on handing out thousands of dollars of subsidies per year to university students, then non-university students should have access to vouchers as well. These vouchers presumably would be of lesser value because they would be directed largely to enhancing skills — and thus appropriable — rather than general education. Nonetheless, this innovation would spark nothing short of a revolution in terms of the non-university skills sector, since it would trigger the emergence of all sorts of private-sector training institutes to compete with community colleges. Corporate Canada would be drawn into this game as well, since vouchers could lead to a version of an apprenticeship system.

This leads to the second general point: namely, that in Canada, the role or function of "technologist" has never been given the status that it has acquired in Europe. This is emerging, in my view, as a very costly error in terms of the overall economy and individual Canadians. Focusing just on the health-care area, the incentives in the former shared-cost system discriminated against paramedics (since they did not qualify for federal sharing). Paradentals fare no better, and only now is midwifery emerging. However, this same problem dominates all sectors. Basically, Canadians have allowed their professional associations (typically self-regulated) to drive the system. As a result, not only is Canada locked into high-cost approaches to a wide range of activities, but the emergence of a technology-based middle class has been "blocked off," as it were. This state of mind (or more appropriately, perhaps, this mind of state) with respect to the whole concept of an intermediate rank of technologist will cost Canadians dearly in economic terms. Just as important, by blocking potential avenues of advancement for average Canadians, it will also cost this country dearly in terms of the inevitable implications for income distribution.

This brings me to the third and related point — namely, Canada's immigration policies. From a strict economic vantage point, why bother to spend valuable dollars on upgrading the

skills of Canadians when we can obtain these skills at zero economic (but perhaps not social) cost from the world economy? Indeed, now that Eastern Europe is opening up, Canada presumably will have access to a fantastic new pool of skilled workers. As long as the principal goal is to maximize productive capacity, this is obviously the way to go.

This aspect of Canada's immigration policy has long troubled me. Fifteen years ago, I argued that the impact of the "points" system was to encourage skilled immigrants, the result of which is to depress the skilled-unskilled wage rate and, therefore, to provide an incentive for Canadians to favor, other things equal, employment in the unskilled area.[17] West German immigration policy has been exactly the opposite: that country has attracted largely nonskilled immigrants. In economic terms, the impact has been the skilled-unskilled wage ratio increased because the influx of immigrants depressed West Germany's unskilled wage levels, resulting in an incentive on the part of Germans to upgrade their human capital. Precisely the opposite message is embedded in Canadian immigration policy. Apart from the questionable morality of one of the world's richest countries' consciously embarking on a program to "raid" lesser-developed countries' human capital, the underlying concern is that, in the process, Canada's policies and incentives are relegating a large segment of Canadians to the economic underclass in an increasingly knowledge-intensive society. While some increase in immigration of foreign workers is probably essential to lower the tax burden of the next generation's workers as they support the expanding numbers and proportion of the elderly, equity suggests that this must not be at the expense of providing Canadians with much better access to needed skills and the incentives to acquire them.

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17 Thomas J. Courchene, "Migration and the Maritimes" (Keynote address to the 4th Annual Atlantic Canada Economics Association Conference, reprinted in *ACEA Conference Proceedings*, 1975, pp. 1-39).

5

Fiscal Policy

Irene K. Ip and William B.P. Robson

The Long-Term Challenge

A sound fiscal policy is a core requirement of an economic strategy that seeks to ensure high and rising living standards for Canadians over the long term. Besides affecting the rate of economic growth, the budgetary decisions of all levels of government have a pervasive influence on the way national income is distributed and on how it is spent — in particular, how much is consumed and how much invested. It is essential to the competitiveness of Canada's economy, and to the future well-being of Canadians, to get these decisions right.[1]

There are five major aspects to a sound fiscal strategy for Canada in the next decade:

- the growth of government spending, and the burden of taxes to pay for that spending, must be controlled;

1 While the observations made in this chapter apply to both the federal and provincial governments, discussion of specific policy options is limited to the former.

- the tax system must be structured to provide a reliable stream of revenue, while striking a balance between economic efficiency, simplicity, and fairness;
- government deficits and debt should observe limits related to the size of the economy, domestic saving, and the stage of the business cycle;
- fiscal policies should not disrupt the long-term plans of individuals and businesses — in other words, they ought to be consistent; and
- governments must become more accountable to voters and taxpayers by improving the manner in which their intentions are announced and their results presented.

A sound long-term strategy, coupled with decisive measures in the 1990 federal budget, will enable Canada to continue to build on recent progress in all of these areas, and enhance the contribution of fiscal policy to future prosperity.

The Need to Control Government Spending

If basic features of individual government spending programs — such as usefulness, current and future costs, and financing methods — escape adequate scrutiny or control, government expenditures may grow faster than the economy over the long term. Although there were periods in the past when such growth was justified, there are now several economic and political reasons for concern about further increases in overall government spending relative to the growth of the economy.[2]

In a general sense, a growing role for government in deciding how national income should be spent and distributed implies that fewer choices will be made outside government, with adverse consequences for individual freedom and responsi-

2 Concerns of the type dealt with here are discussed in a Swedish context in Assar Lindbeck, "Limits to the Welfare State," *Challenge* (January/February 1986), pp. 31–36. See also the chapter on social policy by Thomas J. Courchene in this *Policy Review and Outlook*.

bility. More specific concerns relate to the public sector's use of economic resources, which may be less efficient than in the private sector, while differences in government treatment of various economic activities — through taxes and transfer payments — distort the private sector's own use of resources.

Moreover, as the burden of carrying government activities has increased, the number of activities that governments seek to tax has grown and average tax rates have risen, increasing the incentives to turn to aggressive tax planning and tax avoidance. In turn, these developments lead to a larger role for enforcement. Thus, more and more resources are spent on activities that provide no net benefit to society. Furthermore, as the total tax base erodes, the bill for government activities falls ever more heavily on those who cannot avoid the burden.

The costs associated with high public-sector expenditures relative to gross domestic product (GDP) are difficult to measure, and their impact on economic performance is still a matter of debate. But a greater awareness of the burden of large government is evident in the efforts that many European countries made in the 1980s to reduce the size of their public sectors. And in Canada, as total government expenditures have grown relative to GDP — from some 36 percent in the early 1970s (when Canada's current social program network was virtually complete) to 44.1 percent in 1988 — concern among Canadians about the size of government has grown apace.[3]

A sound long-term fiscal strategy requires that each government program be subject to periodic re-evaluation with an eye to ascertaining whether its original purpose is still valid and, if so, whether the program is addressing it. Where the

3 An unprecedented 79 percent of respondents to a late-1989 Gallup poll stated that taxes were too high, while 50 percent — also a record high — said that big government was the biggest future threat to Canada. In the same poll, 93 percent of respondents expressed a preference for spending cuts in an effort to reduce the federal deficit, compared with 3 percent who opted for tax increases (Lorne Bozinoff and Peter MacIntosh, "Tories Given Low Grades on Tax Performance," *Gallup*, November 9, 1989).

desirability of government action is clear, governments must continually seek out the most efficient system of funding — whether through direct payments, vouchers, or tax credits — and of delivery — through direct provision, or through the nonprofit or private sectors. And governments should refrain from *ad hoc* responses to emergencies where appropriate programs already exist.

As far as the costs of running government are concerned, signals are needed to encourage cost minimization and productivity maximization in the public service. For example, pay scales should be related to output, where feasible, rather than to the characteristics of the employee.

Because of the absence of market signals, it is unlikely that productivity gains in the public sector are greater than those in the private service sector (which it most resembles), which, in turn, has smaller productivity increases than the goods sector. Therefore, to the extent that wage increases in the public sector can be related to productivity gains and inflation, public-sector wage increases should not, on average, lead those in the private sector.

Taxing Problems

The costs that a poorly designed tax system can impose on the economy are many and varied, and tend to increase in importance with the overall size of the tax burden. Moreover, some defects — such as the unreliability of revenue — are likely to lead to other problems that impinge on economic efficiency and fairness.

The federal government's revenue stream needs to be reliable enough to make its fiscal plan meaningful. A heavy dependence on a volatile base or on tax rates high enough to cause the tax base to erode will not do this. An unexpected shortfall may produce a deficit or force *ad hoc* spending cuts and tax changes that are not justified by other considerations. The short-lived attempt to tap oil and gas revenues under the

National Energy Program showed clearly the problems associated with dependence on a volatile base.

At present, the federal sales tax (FST) system provides a good example of base erosion. Despite being singled out as a key area for change in the government's 1984 *Agenda for Economic Renewal* and in its 1985 budget proposals, this tax was left in place when U.S. reforms (and political nervousness about sales tax reform) caused Canadian priorities to shift to personal and corporate tax reform. Meanwhile, however, the anticipation of change, along with a pressing need for more revenue, produced a self-reinforcing cycle of rate raising and ever more aggressive tax avoidance.[4] As a consequence, FST revenues became even more unpredictable, while the economic inefficiencies caused by the tax worsened.

Problems of unreliable revenue have also arisen in the case of the corporate income tax (CIT). Corporate tax revenues have repeatedly fallen short of expectations in recent years as a result of large pools of unused deductions, tax credits, and loss carry-forwards that began to accumulate in the late 1970s and ballooned as a consequence of the 1981–82 recession. Many of the tax provisions that produced this situation diminished or were removed before and during tax reform. Nevertheless, the continuing shortfall of revenue from the corporate sector has helped to produce a series of *ad hoc* tax measures — such as the large corporations tax, which taxes a base bearing no relation to profitability.

It is also important that the tax system not be used as an instrument for providing incentives and disincentives to particular industries, sectors, or activities. An inefficient tax system — one that distorts private-sector decisions about consumption and investment — will harm prospects for longer-

4 The Auditor General has estimated that the use of marketing companies as a tax-avoidance tool was lowering FST revenues by some $300–350 million annually (Canada, Auditor General, *Report to the House of Commons: Fiscal Year Ended March 31 1989* [Ottawa: Supply and Services Canada, 1989], pp. 92–93).

term growth. (It is necessary to distinguish here between the use of, say, the personal tax system as a *vehicle* for targeting transfers, as with the calculation of the child tax credit from information on the personal tax form, and its use as an *instrument* of policy, as with the deduction related to investments in Canadian film productions.) The FST again presents a good example. This tax has a number of perverse features, among which are preferential treatment of imports over domestic items and widely varying rates on different goods. The government has estimated that replacing the FST with a Goods and Services Tax (GST) along the lines of the proposals contained in its August 1989 Technical Paper would, over time, raise Canadian output by some 1.4 percent of GDP — equal to about $325 (1989 dollars) per person.[5]

Further pervasive damage to economic efficiency arises from a tax system that makes inadequate provision for inflation. Canada's personal income tax (PIT) incorporates only partial indexation of tax credits and brackets, and taxes the inflation component of investment income. The corporate tax system taxes profits that have been inflated by the use of (low) historical values for calculating depreciation, by increases in the prices of inventories, and by the inflation component of investment income. (These influences are partially offset, particularly on the corporate side, by the deductibility of interest payments — including the inflation component — in calculating taxable income.) By lowering the real return to capital, such a system creates a bias against saving and investment, and damages prospects for future growth.

An overly complex tax system imposes excessive administrative and compliance costs. These drawbacks were highlighted in the 1986 *White Paper on Tax Reform*, which commented on the increasing tendency of Canadians to resort to professionals for help in preparing their tax returns, in part

5 Canada, Department of Finance, *Goods and Services Tax: Technical Paper* (Ottawa, August 1989), pp. 31–37.

because they had trouble dealing with numerous and complicated forms, and in part because of the opportunities for avoidance presented by myriad special provisions.[6] They are also indicated by the steady increase in person-years allocated to Revenue Canada Taxation each year.[7]

Equity is served when everybody pays a fair share of the cost of government programs. If the tax system is unfair, or so complex that comparisons of the taxes paid by different individuals are difficult or impossible, it may make the objective of equity difficult to achieve and erode the willingness to comply which now underlies a large part of the Canadian system. Any attempt to assess how much total tax any individual or group is actually paying is particularly difficult when various types of taxes proliferate. The costs associated with unfairness or the appearance of unfairness do not lend themselves easily to measurement in, say, dollar terms, but several aspects of Canadian tax policy need examining in this light.

- The principle of horizontal equity — that persons with the same ability to pay should pay the same amount of tax — is in several respects not well served by Canada's tax system.[8]

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6 Canada, Department of Finance, *The White Paper: Tax Reform, 1987* (Ottawa, June 18, 1987), p. 10. In 1969, 79 percent of taxpayers prepared their own returns. By 1984, this figure had fallen to 64 percent, and in 1987, the latest year available, it had declined to 58 percent (figures from Canadian Tax Foundation, *Twenty-Seventh Annual Report* [Toronto, 1973], p. 19; and Revenue Canada Taxation).

7 The 1989/90 Main Estimates show employment (as measured by person-years) in Revenue Canada Taxation up over 70 percent from the 1972/73 level, despite the fact that total federal government employment (according to adjusted data provided by Treasury Board) was virtually the same as in the earlier period.

8 With regard to annual income, which is the most common (though not the best) measure of ability to pay, Allan Maslove has calculated that even after dropping extreme cases, the average tax rates that families in a given income bracket face vary by 20–25 percentage points, a result which the 1987 tax reform did not change appreciably (Allan Maslove, *Tax Reform in Canada: The Process and Impact* [Halifax, N.S.: Institute for Research on Public Policy, 1989], pp. 46–48, 53).

- The PIT (reinforced by the 1987 reform) has strong elements of vertical equity — a tax burden rising with ability to pay — which Canadians value highly. However, the presence of payroll, excise, sales, and other taxes means that any approximation to a "fair" regime on the part of the entire tax system will be a result as much of good luck as good design.
- The capital gains exemption lacks justification on economic or equity grounds, and adds considerably to the complexity of the PIT system.
- The partial deindexation of the PIT system, along with the removal of the $1,000 interest and dividend deduction, has made increases in income that arise solely from inflation subject to tax.
- Despite the less steeply graduated personal tax rates brought in with the 1987 reform, the continuation of surtaxes, and the current absence of income-averaging provisions puts those whose incomes tend to vary greatly from year to year at a disadvantage.

For more than two decades, federal finance ministers have emphasized fairness, efficiency, and simplicity in the tax system. Since fairness is usually achieved only by sacrificing simplicity, an acceptable balance needs to be struck between the two, while maintaining as neutral a tax regime as possible.

Deficits and the Constraint of Debt Service[9]

A third key dimension to fiscal policy — and one that, with reason, became a high-profile issue in Canada in the 1980s —

9 The C.D. Howe Institute's concerns about the effects of government deficits have been elaborated in Edward A. Carmichael, *Tackling the Federal Deficit*, Observation 26 (Toronto: C.D. Howe Institute, 1984); Neil Bruce and Douglas D. Purvis, *Evaluating the Deficit: The Case for Budget Cuts*, Policy Commentary 4 (Toronto: C.D. Howe Institute, 1984); and Maureen Farrow and William B.P. Robson, *Building a Constituency for Deficit Reduction*, Fiscal Policy Monitor 1 (Toronto: C.D. Howe Institute, April 1989).

is government borrowing and rising public debt. Unsound policies in this area impose several types of costs.

When governments run stimulative deficits during economic expansions, the central bank's fight against inflation becomes more difficult. Government borrowing adds to demand pressure in the economy and may also raise inflationary expectations — which become self-fulfilling — if people suspect that a large part of the public debt will eventually be "monetized" by the central bank. And as the debt grows, a vicious circle develops. At present, the size and short average term to maturity of the federal government's debt are magnifying the Bank of Canada's difficulties in controlling inflation, since a 1 percent rise in short-term interest rates over a year tends to increase federal expenditures by more than $1.7 billion, adding further to the pressure of demand. The Bank's task of controlling inflation would be considerably easier if fiscal policy were more restrictive.

Government borrowing during expansions may also put pressure on Canadian financial resources by absorbing domestic saving, with negative implications for capital investment and foreign indebtedness. Table 1 illustrates Canada's current situation in this regard, by showing the various sources of funding for Canadian capital investment (both public and private) in historical perspective.

During the 1960s and early 1970s, Canadian domestic investment averaged a little over 23 percent of GDP. Private- and public-sector sources both played a major role in funding this investment, with foreign sources providing a relatively small amount (less than 1 percent of GDP). Since 1975, investment has fallen as a proportion of GDP, while the pattern of financing has been markedly different: on average, funding from private sources has increased, but with the public sector's shift to a negative position Canada's dependence on foreign capital has grown. Since the recovery, a discouraging pattern has emerged. As is usual during an expansion, investment has

Table 1

Summary of the Capital Finance Account, 1961–89
(as a percentage of Gross Domestic Product)

	1961–74 average	1975–88 average	1985	1986	1987	1988	1989[a]
Sources of Investment Funding							
Private sector	18.3%	21.9%	23.6%	21.1%	20.9%	20.3%	20.7%
Public sector	4.0	–1.2	–4.1	–3.1	–2.1	–0.4	–1.3
Total national	*22.3*	*20.7*	*19.5*	*18.0*	*18.9*	*19.9*	*19.4*
Foreign	0.9	1.5	0.7	2.4	2.2	2.5	3.9
Total investment	*23.2*	*22.2*	*20.2*	*20.4*	*21.1*	*22.4*	*23.3*

[a] First nine months.

Source: Statistics Canada, *National Income and Expenditure Accounts*, quarterly tables.

rebounded while funds available from the private sector have slipped, primarily as a result of a falling personal saving rate. But instead of accommodating these shifts by becoming a net supplier of funds, the public sector remains in a negative position. As a result, Canada's dependence on foreign capital has ballooned: net foreign borrowing, which averaged less than $1 billion annually in the first half of the decade, amounted to more than $24 billion over the 12 months to the end of September 1989. The servicing of Canada's foreign debt, which now exceeds $240 billion, is a large and growing drain on the current account, lowering the returns to Canadians from their productive efforts.

Perhaps the most straightforward effect of borrowing — and one whose effects on Canada are becoming plain — is that deficits over a certain size cause interest payments to take up an increasing portion of the government budget. Two key in-

dicators of a deteriorating situation in this regard are a rising debt-to-GDP ratio and a rising "real" interest burden.

The debt-to-GDP ratio expresses the net public debt in relation to the size of the economy, a useful summary measure of the affordability of a given level of debt. The real interest burden is the cost of interest payments after adjustment for the erosion of the face value of the debt by inflation. Although the total interest bill represents a claim on the government's cash, the portion of interest costs that merely compensates investors for the dwindling purchasing power of the principal amount of their government paper does not, in an important sense, represent a "real" cost to the treasury.

As the cost of servicing accumulated past deficits rises, fluctuations in interest rates can become a dominant factor in decisionmaking, influencing changes in program spending and taxation, and causing such priorities as equity, efficiency, and economic stabilization to be less well served.

The paralyzing tendencies of a large interest burden on other aspects of Canadian federal fiscal policy are no longer merely a prospect off in the indefinite future; they have become a reality. The importance of debt service in the overall budget is highlighted by the fact that, while federal noninvestment revenues are now more than $3 billion in excess of program expenditures, they still fall far short of covering debt-service costs. The result is continued deficits and even higher future debt-service charges.

The persistent pressure of debt service on the federal budget has forced a long-overdue look at some costs that should have been trimmed anyway, as the government's success in cutting overhead since 1984 attests. But it has also had a negative impact on public policy initiatives in a number of other areas, such as tax reform, unemployment insurance reform, and day care. At present, it is forcing Canadians to face further increases in taxes at a time when the economy appears to be weakening.

Last but not least, deficits cause political strains. By divorcing government activities from the costs of paying for them, deficits undermine the credibility of the political system. When tax increases lag rises in program costs, governments tend to resort to periodic tax catchups that come as a shock to taxpayers and — not being matched by an increase in services or easily related to services that were put in place years before — are likely to meet with considerable public resistance. During the period of fiscal retrenchment in Canada since fiscal year 1984/85, federal program expenditures rose 19 percent, from $86.8 billion to an estimated $103.5 billion in 1989/90, while noninvestment revenues rose over 60 percent, from $66.6 billion to $107.1 billion. This means that the dollar of tax revenue that "bought" $1.30 in federal programs in 1984/85 "buys" only 97 cents in federal programs today, a fact that might help to explain a large amount of Canadians' apparent irritation with tax levels. Worse yet, according to the figures underlying the April 1989 *Fiscal Plan*, $1.00 of tax revenue will "buy" a mere 86 cents' worth of federal programs by fiscal year 1993/94 — a 44 cent drop in federal services and transfer payments per tax dollar in a decade!

A sound fiscal system does not, however, preclude government deficits. It may be appropriate for the government to borrow for the following reasons:

- when the benefits of an expenditure measure will be spread over a number of years;
- to facilitate the operation of financial markets;
- during a contraction in economic activity, when the automatic responses of the tax and transfer systems dampen revenues and boost expenditures; or
- to finance the inflation component of debt-service charges.[10]

10 As was mentioned above, as long as inflation persists, the book value of the government's debt declines in real terms. Since part of the interest payments on the outstanding debt is an offset to the decline in the real value of the debt, the deficit is overstated by that part of the service charge.

Government balances, therefore, may not average out to zero over the business cycle. As a general rule, however, deficits should decrease — absolutely and relative to the economy — during expansions, while the net debt-to-GDP ratio should decline. And the government sector should not contribute to a declining national saving rate — which implies a deteriorating external balance and a more unpredictable outlook for interest rates and the exchange rate — during expansions, when accelerating fixed capital formation by the private sector needs to be financed.

These guidelines imply that, subject to the exceptions cited, new spending proposals should either replace a cancelled program or be accompanied by adequate tax increases. If there is a general consensus about a particular bundle of government programs, there should be a straightforward acknowledgement of the necessary tax burden to pay for these services. Only by being presented with the bill for the goods can taxpayers make an informed choice.

The Importance of Consistency

Consistency also is an important facet of fiscal policy. The *type* of response that policy will make to changed circumstances should be predictable and major adjustments ought to be made with suitable lead times. Changes to spending and taxes that are made without sufficient notice or discussion introduce a wild card into planning by individuals and businesses. Additional uncertainty imposes economic costs, since it leads individuals and businesses to discount longer-term outcomes more highly, thus favoring immediate consumption and quick paybacks over long-term saving and investment.

The costs imposed by inconsistent fiscal policy are very difficult to quantify, but there are grounds for suspecting that they continue to affect the Canadian economy. On the spending side, for example, transfers to provinces have been subject

to a series of *ad hoc* modifications, presenting provincial governments with unexpected shortfalls that have adversely affected the fiscal environments in individual provinces. On the revenue side, frequent modifications — such as those affecting individuals' interest and dividend income, the treatment of capital gains, the rules relating to preferred shares, and the timing of Registered Retirement Savings Plan (RRSP) changes[11] — have rendered planning difficult. In addition, the increasing tendency to make adjustments to the tax system by press release, information circular, and interpretation bulletin — however justified the measures involved — has introduced a source of uncertainty about the timing of fiscal measures.

It is essential that government decisions are not themselves a source of uncertainty. Major fiscal policy changes ought to be announced, discussed, and then legislated to take effect so as to allow agents time to adjust their plans adequately: the more far-reaching the effects of the change, the longer the lead time. For example, major legislated changes in elderly benefits should be phased in after a long lead time; changes affecting business investment should have lead times that reflect the time involved in planning and carrying out the investment.

There is risk, to a greater or lesser degree, in all forms of economic endeavor. The fiscal system should not discourage private sector risk-taking or diversification, nor should it be an added cost to long-term planning.[12] Government intervention is certainly justified in areas where no market mechanism exists to deal adequately with risk — the lack, for example, of

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11 The government tabled the long-delayed RRSP legislation, incorporating increases in contribution limits beginning in 1991, on December 11, 1989. However, even if such legislation is passed, past experience must cast doubt on the likelihood of the scheduled increases being brought in on time.

12 For a detailed discussion of these issues, see Jack M. Mintz and Douglas D. Purvis, "Economic Instability: What Is the Appropriate Government Response?" (paper prepared for a conference on "Unstable Commodity Markets: Incomes, Jobs, and Public Policy," sponsored by the Institute of Intergovernmental Relations, the Western Centre for Economic Research, and the C.D. Howe Institute, Calgary, 1988).

private insurance against job loss makes a properly managed public program appropriate. Moreover, private-sector participants in such programs should be expected to share risk and be discouraged from depending entirely on the government. Where the government is already involved in risk-sharing programs, *ad hoc* appeals for assistance should be refused.

The costs associated with unpredictable fiscal policy also extend to discretionary changes that are intended to smooth out fluctuations in the business cycle. Discretionary stabilization measures not only add to uncertainty; they are of dubious value for several other reasons.[13] It is difficult to estimate turning points in the economy. Moreover, the available tools are blunt. For example, a sales tax cut might benefit imports more than domestic production, a personal income tax cut will not necessarily go into higher spending, and government capital projects are difficult to implement in a timely fashion.

In general, the federal government's record in implementing discretionary stabilization policies has not been very good.[14] All too often, discretionary changes were prompted by perceptions of the state of the economy that turned out to be incorrect, or took effect after such a lag that they were no longer appropriate. While automatic stabilization — arising out of the normal relationships between the business cycle and the budget — performs a useful role, discretionary stabilization policy appears to be destabilizing as often as not and should be avoided except during major recessions or booms.

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13 Ironically, discretionary policies that are too predictable may also cause instability. For example, during a recession, businesses may wait for investment incentives, thus delaying their capital spending and worsening the downturn (ibid., pp. 11–12).

14 From 1963 to 1988, the stance of federal fiscal policy (as measured by changes in the structural balance) was appropriate to fluctuations in the economy — that is, stimulative when growth was slowing and restrictive when growth was accelerating — only half the time (Canada, Department of Finance, *Quarterly Economic Review: Annual Reference Tables*, June 1989, Tables 4.1 and 64.1).

The Key Issue of Accountability

The integrity of public policy formation hinges on the transparency of the policy process and on the government's being accountable for its actions. When major expenditure and tax changes are made without sufficient discussion or notice, when the budgetary process is bypassed — for instance, by inflation-induced revenue increases rather than legislated ones, or tax changes made though press release — or when the government's presentation of its intentions and results is incomplete or confusing, important principles of parliamentary government are undermined. A representative democracy requires an informed electorate and informed parliamentarians, able to debate proposals intelligently and to call the government to account for its actions.

Government accountability is as critical in fiscal matters as in all government activities. A key difficulty in fiscal policy concerns the presentation of information. Because voters have to be able to keep track of what the government has done, more comprehensive accounting than the standard budgetary presentation is needed. For example, "tax expenditures" as well as ordinary expenditures in various areas — elderly benefits, family support, regional development incentives — should appear in budgets, estimates, and financial statements.

Achieving a Sound Fiscal Environment

To a large extent, the aspects of fiscal policy discussed here — program spending, the tax system, deficits, predictability, and accountability — are intertwined. Unwarranted growth of a given program, for example, threatens undesirable tax hikes or deficit financing. Persistent deficits contribute to uncertainty about the future course of programs and taxes. And erratic fis-

cal policy may, in turn, damage economic performance, with adverse effects on spending, revenue, and deficits.

Limiting these costs is, accordingly, a multifaceted process. In recent years, the Canadian fiscal environment has shown substantial improvement. Since 1984, the aggregate growth of noninterest expenditures has slowed, and spending in some areas has been controlled much more rigorously than in the past. Personal and corporate tax changes in the 1980s have improved the efficiency and fairness of the tax system in important respects. The trajectories of deficits and debt have moved toward sustainable paths, albeit too slowly. And the predictability and presentation of fiscal policy have improved.

Canada's fiscal system is, however, still far from a form that the C.D. Howe Institute would consider sound. Over the past five years, both federal and provincial governments have made *ad hoc* expenditures on sectors — particularly agriculture — that were already covered by existing programs. Much of tax reform appeared to be largely reactionary, while the delay in introducing stage two (the GST) gave an impression of indecisiveness. Deficit targets have not been kept in spite of good economic growth, and the debt-to-GDP ratios of the federal and the provincial-local sectors have continued to rise. Abrupt, *ad hoc* changes and obscure presentation of data persist. In working toward a sound, longer-term fiscal system, it will be necessary to improve on this record.

Spending Wisely

There is always one more program that one more interest group feels the public sector should supply. The federal government, therefore, needs to focus constantly on the total level of expenditures relative to national income that is compatible with the goals of an efficient economy and an equitable fiscal system. Restraining overall expenditure growth requires the establishment of a target for expenditure relative to GDP, as well as

realistic assessment of, and planning for, the factors that influence the future cost of individual programs.

Keeping control of government expenditures implies hard choices among competing demands. Because there is no simple way to eliminate the ongoing multiplication of claims on government, the choices need to be presented in terms of program priorities or increases in taxes. Table 2 gives a breakdown of federal government spending along lines that indicate where expenditures have been best controlled recently, and help to draw out some of the tradeoffs Canadians are likely to face in the next decade.

In the four years from 1984 to 1988, total "discretionary" program spending — defined here to exclude interest payments, government pensions, and veterans' benefits — grew by less than the rate of inflation; expressed as a proportion of GDP, it fell from 18.3 to 15.5 percent. This result was achieved despite substantial growth in three major areas — defense, "entitlement" transfers to persons, and transfers to other levels of government — and reflects reductions in dollar terms in several categories of nonstatutory transfers and considerable success in containing the costs of government operations.

It is vital that the federal government should continue to build on this progress, all the more so because it is quite likely that new demands will be placed on the federal budget in coming years by environmental stresses, by the need for education and training assistance, and by new child-care measures.

A number of general principles should guide decisions about federal expenditures in coming years:

- A realistic assessment of potential future costs is crucial with respect to programs that are likely to be very long term. Some of the determinants of growth, such as demographic trends, are relatively easy to predict, while others, such as inflation rates, entail greater risks. The eventual cost of such important innovations as federal-provincial cost sharing of health and education as well as the full indexation of Old Age

Table 2

Discretionary Federal Government Expenditures, 1984 and 1988

(national accounts basis)

	$ billions			As a Percentage of GDP		
	1984	1988	Change (percent)	1984	1988	Change (level)
Transfer payments[a]	$58.7	$66.8	13.7%	13.2%	11.1%	-2.1
Transfers to persons	26.6	32.2	20.7	6.0	5.3	-0.6
Entitlements[b]	24.2	29.9	23.3	5.5	5.0	-0.5
Other	2.4	2.3	-5.2	0.5	0.4	-0.2
Transfers to other levels of government	19.9	24.7	24.1	4.5	4.1	-0.4
Subsidies & capital assistance	10.8	7.8	-28.1	2.4	1.3	-1.1
International contributions	1.3	2.1	56.7	0.3	0.4	0.0
Defense	8.0	10.5	30.4	1.8	1.7	-0.1
Compensation to employees[c]	9.1	10.3	13.1	2.0	1.7	-0.3
Other	5.5	5.8	4.7	1.2	1.0	-0.3
Total	*81.4*	*93.3*	*14.6*	*18.3*	*15.5*	*-2.8*
Note: Consumer Price Index	122.3	143.8	17.6			

[a] Excluding pensions and veterans' benefits.

[b] Elderly, family, and youth benefits; unemployment insurance benefits; grants to native people.

[c] Nondefense portion (estimated).

Note: Numbers may not add due to rounding.

Sources: Statistics Canada, *National Income and Expenditure Accounts: Annual Estimates*, various issues; and estimates by the C.D. Howe Institute.

Security (OAS) and family allowance payments were not well predicted, and added to the instability of federal budgets in the 1970s. In view of this experience, it is necessary to conduct, and make public, sensitivity analyses of the cost of both new programs and changes to existing ones.

- Containing costs of total program expenditures by ranking individual programs according to priorities should make it possible to fund adequately those that are retained. Containing costs by across-the-board reductions results in underfunding of both high- and low-priority programs alike.
- The appropriateness of various income-support programs needs constant scrutiny in light of changing demographic and economic circumstances. For example, in recognition of the increasing relative wealth of the elderly, the lengthening of life spans, and the feasibility of greater labor force participation by over-65s, consideration might be given to raising the age at which OAS becomes payable, in stages, back to 70, with a suitable lead time.
- The federal government should make an early start on discussions with the provinces about the future financing of health, postsecondary education and welfare. Possible options are the replacement of the Established Programs Financing (EPF) cash transfer with a further transfer of tax points to the provinces for health and direct support to individuals for postsecondary education[15] and the integration of General Welfare Assistance support under the Canada Assistance Plan (CAP) into an integrated tax-transfer system.
- A variety of regional programs of doubtful merit persist, many of them under the Atlantic Canada Opportunities Agency, the Department of Western Economic Diversification, and the Economic and Regional Development Agreements (ERDAs). In the absence of evidence that such

15 See the chapter on social policy by Thomas J. Courchene in this *Policy Review and Outlook*. Three years' notice is required to cancel the EPF arrangement.

programs have been successful in diversifying the economic base of the recipient provinces, this spending should be curtailed and other regional strategies explored. For example, part of the saving could be used to augment general transfers (such as equalization payments) to have-not provinces, transfers for education and training, or to provide seed money for small-scale venture capital operations.[16]

- The government must resist the temptation to take on new initiatives or expand existing programs because some slack has been created by the end of a program. It is notable that the subsidies and capital assistance area of federal spending remains in the $8 billion range (see Table 2) despite the termination of sizable energy programs. The emergence of new, mostly *ad hoc*, subsidies — particularly in the agricultural area — has caused this category of expenditures to remain too high; these payments must be rapidly curtailed.[17] In addition, expenditures on energy megaprojects that are not already firmly committed should not be made.
- The federal government gives financial support to various interest, advocacy, and cultural groups. There are obvious political rewards associated with this support. It is not clear, however, that the funding many of these groups receive is in proportion either to their support by voters in general or to the public purpose being promoted, particularly when in-

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16 Data on labor income per capita suggest that traditional large-project-oriented subsidies have failed to close the gap between the "have" and "have-not" provinces over the past decade, suggesting the need for an alternative to the "trickle-down" strategy of development. Loans can be provided by a cooperative banking operation to individual, small-scale entrepreneurs who do not qualify for conventional bank loans.

17 In 1985, the Task Force on Program Review recommended "that the government consider covering losses through the crop insurance system and not through ad hoc programs" (Task Force on Program Review, *Economic Growth: Agriculture* [Ottawa: Supply and Services Canada, 1985], p. 187). The Auditor General concluded in 1989 that, when other agricultural programs benefiting grain farmers have been taken into account, the 1986 Special Grains Program "may not have been needed at all" (Canada, Auditor General, *Report*, p. 87).

dividual groups receive money from a variety of government sources, with no overall direction or attempt to rank priorities. Many of these organizations are capable of attracting private-sector support. Rather than have politicians and bureaucrats decide among competing lobbyists, funding for all such organizations could be put on a matching basis, with the ratio of government funding to private donations determined by an overall budget for such transfers.

- There are a number of programs supporting various types of research and scholarship — including the Canada Council, the Natural Science and Engineering Research Council, the Social Sciences and Humanities Research Council, and the International Development Research Centre — but there is no overview or target of the total amount paid to institutions and individuals, no apparent overall ranking according to costs and benefits, and no collective accountability. These shortcomings need to be addressed. As a start, it would be desirable for the government to present — and target — a global spending figure for such transfers.
- A full study is needed of the multitude of programs that aim to enhance Canadians' collective identity. Some of these programs have become national institutions to such an extent that it is difficult to be objective about them. The aggregate expenditures are far from insignificant, however, and compete with other objectives. Many of these activities are carried out by Crown corporations that have characteristics similar to those of commercial operations. If these characteristics were strengthened, partial or total privatization might become feasible. The CBC, the Canadian Film Development Corporation, and the National Film Board, for example, could be asked to gradually increase the contribution of nongovernment revenues to their operating costs. Consideration might be given to appeals for funds from the general public, as is currently done by TV Ontario, or to more aggressive marketing of products and advertising time.

- In the public works area, several projects — the Museum of Civilization, the National Art Gallery, and Le Vieux Port de Montréal — are now virtually over. In fiscal year 1989/90, an estimated $60 million was to be spent on these buildings. That money should be available to reduce the deficit in 1990/91 and not be seen as available for new projects. Apart from the maintenance of existing buildings, construction that cannot be clearly demonstrated as necessary should be postponed until the deficit is better under control.
- The bulk of the airports and ports operated and assisted by the federal government, many of which incorporate substantial developed real estate, should be moved rapidly onto a more self-sustaining footing and either privatized or transferred to other levels of government. This would likely improve the efficiency and accountability of many of these operations, by allowing them to respond more flexibly to local conditions. The privatization of such assets would also help the government to keep the deficit on a downward course.[18]
- Containment of government operating costs is also crucial. The federal government's record in this respect during the 1980s was better than that of other levels of government.[19]

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18 The potential for asset sales to improve the government's financial position by providing additional revenue should not be exaggerated, but this source can almost certainly be tapped to a greater extent than it has been up to now. Off-balance-sheet items such as airports and ports are particularly attractive options. Accounting difficulties make the sale of on-balance-sheet items politically unattractive for the most part, since proceeds from sales may fall short of the values shown on the government's books, resulting in writeoffs that add to the recorded deficit. This is principally an accounting problem, however, and should not deflect the government from divesting itself of assets that do not serve a clear public policy goal.

19 During the 1980–88 period, provincial administration settlements exceeded those in the private sector in six years, in five years in the local administration sector, in four years in the education, health, and welfare sectors, and in two years at the federal level. Recent data (third quarter 1989) indicate that nonfederal public-sector settlements continue to outpace their private-sector counterparts.

It must continue to seek ways to increase the efficiency of the civil service. Various methods for lowering overheads have been suggested and tried: a "Suggestion Award Program" for the federal civil service has produced savings that are a large multiple of the awards granted, and bonuses for managers for reducing staff have been proposed by an internal study of ways to modernize the service.[20]

Getting the Tax System Right

The federal government has made major steps in the development of a fairer and more efficient tax system by lowering rates and broadening bases, and through the replacement of deductions by tax credits. However, because tax reform has been taking place at a time of pressing revenue needs, many distortions and inequities were not dealt with, while new ones have been introduced. Tax reform should be an ongoing process and, over the long term, these issues must be addressed.

In particular, it would be better to deal with the goal of vertical equity by integrating the income tax with the transfer system rather than through exceptions built into excise, sales, or payroll taxes. (Such patchwork attempts at "fairness" are likely, in any event, to decrease horizontal equity.) The federal and provincial governments have for many years debated the desirability of directing social assistance more to the needy, discouraging dependence on governments, and protecting human dignity, while the PIT system has long been recognized as an attractive delivery vehicle for income-support payments.

The gradual introduction of sales and property tax credits by a number of provinces in the 1970s and, at the federal level, the substitution of part of the family allowance by a child tax credit in 1978, showed the way such an integration might work.

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20 See Canada, Auditor General, *Report*, pp. 184–185; and Hugh Winsor, "Review will prepare civil service for 'leaner, meaner' government," *Globe and Mail* (Toronto), December 13, 1989.

In 1978, the Department of Finance recognized the feasibility of integrating transfer programs into the tax system through the use of refundable tax credits. It noted, however, that

> [t]he present tax system can only be used to determine a year-end benefit, which could be delivered as part of the year-end tax refund cheque, and the scope to assess eligibility for tax credits is confined to the kinds of information typically collected by the present tax system.[21]

Since that time, a number of developments — the move to delivery of the child tax credit in instalments, the conversion of most PIT deductions to tax credits in 1988, the taxback of OAS and family allowance transfers, and the planned delivery of an enriched sales tax credit in quarterly instalments beginning in 1991 — have moved the process of integrating the tax-transfer system further along.

A longer-term goal would be to make all "social program" tax credits — for example, dependent, tuition fee, education, age, and pension — needs tested and refundable. A better integration of the tax-transfer system would have the additional efficiency-related benefit of helping to remove disincentives to work and to discourage underground activities.[22]

Further desirable directions for tax policy are the following:

- The tax system should return to the basics: collecting target revenues on the broadest possible base. Both marginal and average tax rates must remain not too far out of line with those in the United States for those factors of production and categories of income that are highly mobile internationally. Over the next decade, the costs of a noncompetitive tax structure are likely to continue to be a major concern.
- Governments need to work together to achieve a simpler tax system overall. The greater use of payroll taxes, the intro-

21 Canada, Department of Finance, *Integration of Social Program Payments into the Income Tax System* (Ottawa, November 1978), p. 33.

22 It would also be desirable for need to be uniformly determined on the basis of family, as opposed to individual, income.

duction of flat-rate income taxes at the provincial level, and *de facto* permanent surtaxes have added to the difficulty of evaluating the equity of the overall system, despite the emphasis placed on equity in official statements.

- The federal government has indicated that it prefers to reduce the weight of income in the collection of personal taxes in favor of consumption, which would improve life-time equity. (Originally, a reduction in middle-income tax brackets offset by higher revenues from the replacement of the FST by the GST was proposed.) However, both the impact on measured prices and the United States' low reliance on general sales taxes impose limits to the rates of Canadian sales tax. The Economic Council of Canada, among others, has advocated liberalization of registered saving plans as a way of moving the PIT partially toward a personal expenditure tax.[23] The advantages of such a system are threefold: it would encourage people to plan for long-term goals such as retraining; it would move the system toward the taxation of life-time rather than annual income, which is a better measure of ability to pay; and it would help individuals with very volatile income patterns to average their tax burden.
- A parallel treatment of profits and losses would be fairer, and might reduce the need for "bailouts" and eliminate the uncertainty attached to unused losses. The introduction of full-loss deductibility and refundability would remove a bias in the tax system against risky ventures.
- The tax system should be modified in such a way that revenues are not increased because of inflation. If the government needs extra revenues, the increases should be proposed and debated in Parliament. The current "indexation deductible" of 3 percent is not justifiable on any grounds other than the desire to impose invisible tax increases — and

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23 See Economic Council of Canada, *Road Map for Tax Reform: The Taxation of Savings and Investment* (Ottawa: Supply and Services Canada, 1987), pp. 14–15, 18–19.

if 3 percent is reasonable, why not 4 or 5? The restoration of full indexation of PIT brackets and credits should be a priority. Making an allowance for the inflation component of corporate profits and investment income, as well as working out an appropriate treatment of the inflation component of capital gains, is more complex but the distortions imposed by ignoring inflation in these areas are significant, and this matter merits further examination by both the government and the private sector.

Containing Deficits and Interest Costs

There is general agreement that the federal government's attempts to reduce the deficit, absolutely and relatively, have been too gradual. There is, however, little point in dwelling on the errors of the past. Rather, the energies of politicians, bureaucrats, and analysts need to be directed to working out a long-term plan that Canadians can live with — one that has realistic goals and that will not put the economy at risk.

Such a plan should be guided by two indicators. The debt-to-GDP ratio, the first indicator, is a key measure of the affordability of the debt burden implied by a given deficit path. While the direction of this ratio is critical, its level in a given year is not a suitable short-term target, since higher-than-expected inflation or real growth can cause the ratio to fall, allowing the government to relax its deficit-cutting efforts. For this reason, it is also important for the government to maintain short-term targets for a second indicator, the "real" deficit — that is, the deficit adjusted for the inflation component of interest payments — and to ensure that this "real" deficit keeps declining.[24]

24 As the Bank of Canada's policy begins to take effect and the economy approaches price stability, the real interest burden will approach the nominal one. This discussion of real versus nominal interest burdens should not be taken as implying simply that things are less serious than they look. In fact, in an environment of falling inflation, these considerations make appropriate deficit targets harsher than they would otherwise be.

The external balance should not need independent targeting. A nondiscretionary fiscal policy that keeps the deficit and debt within stable limits should result in the government's being a net lender when the private sector is a net borrower during booms, and vice versa during slumps, keeping foreign imbalances at manageable levels.

A disappointing feature of recent fiscal plans has been the fact that the projected pace of deficit reduction has been so slow that the debt-to-GDP ratio has been projected to stabilize only several years out. As a result, even with stable interest rates, the cost of servicing the debt would continue to rise faster than the country's economic growth. The dangers of a lack-adaisical course, given the current size of the net debt, were made strikingly clear in the 1989 budget, which projected net debt charges to rise by some $6.4 billion, or 23 percent, in the current fiscal year, causing a dramatic upward shift in the target for the total deficit.

A partial fiscal plan — focusing only on the bottom line — that represents a decisive but manageable return to a sustainable fiscal track is shown in Table 3. This plan involves more ambitious targets than those in the April 1989 *Fiscal Plan*: the primary surplus would be higher by an average of $4 billion annually from 1990/91 to 1993/94 (savings in debt-service charges would make the total deficit lower by an average of $4.6 billion annually). Such a course would reverse the upward trend in the debt-to-GDP ratio sooner than the 1989 plan projected, and set it firmly on a downward course through the 1990s. The plan targets a surplus in the real balance by the mid-1990s, and could lead to a surplus in the total balance in the second half of the decade. A debt-to-GDP ratio of 50 percent by 1994/95 may not seem like an impressive achievement — the ratio was 44.8 percent in 1984/85, when the Conservatives first took office, and 27.6 percent in 1980/81, before the last recession — but it would be below current levels, a feature that has not been a part of any recent fiscal plan.

Table 3

A Sustainable Long-Term Fiscal Track, fiscal years 1988/89 to 1994/95

($ billions, except as noted)

	1988 /89	1989 /90	1990 /91	1991 /92	1992 /93	1993 /94	1994 /95
Primary balance	$–1.1	$3.6	$9.1	$13.7	$19.0	$24.4	$27.8
Net debt charges	27.7	34.1	35.1	32.7	34.3	33.7	30.6
Total balance	–28.7	–30.5	–26.1	–19.0	–15.3	–9.3	–2.9
Net debt	320.9	351.4	377.5	396.4	411.8	421.0	423.9
Net debt (as a % of GDP)	53.4%	54.2%	55.6%	55.1%	54.0%	52.1%	50.0%
Note: "Real" balance	–17.3	–16.5	–15.7	–9.1	–4.9	1.5	6.4

Sources: Canada, Receiver General for Canada, *Public Accounts of Canada: 1989* (Ottawa: Supply and Services Canada, 1989); and C.D. Howe Institute calculation, based on economic projections contained in the April 1989 budget.

The outcome envisaged in this plan is sensitive to assumptions about interest rates. These calculations are based on the forecast underlying the April 1989 *Fiscal Plan*. If the government's interest-rate projections prove to be too low, its response should depend on whether the higher rates reflect higher-than-expected inflation. To the extent that they do, the increased interest cost really represents an additional prepayment of debt — that is, the real interest cost is unchanged — and no offsetting expenditure or revenue changes are necessary. If, on the other hand, the real interest cost is higher, changes to other parts of the budget will be needed to prevent the real deficit, and the debt-to-GDP ratio, from moving off track. An indispensable part of this plan would be a commitment to employ greater fiscal stringency following setbacks.

Improving Consistency and Accountability

The process of moving toward a fiscal regime characterized by consistent, stable fiscal policy and transparency of government operations demands action on a number of fronts.

Stability on the expenditure side requires that, once a program has been implemented, major alterations — particularly cuts or cancellations — should only be made with adequate notice to allow beneficiaries to adjust their plans without undue penalty. Federal-provincial EPF transfers should not be subject to the kinds of shocks that occurred regularly in the 1980s. The legislation for the Fiscal Equalization Program traditionally has been reviewed every five years, a schedule which provided an opportunity for the examination of other federal-provincial fiscal arrangements. These five-year periods were an appropriate time frame for those programs. Other programs might have sunset provisions or compulsory reviews at appropriate periods.

Likewise, major changes to the tax system that could be destabilizing for those sectors affected should have an adequate lead time built into the legislation. There are some recent precedents for the principle of phasing in changes over multi-year periods: the changes in inclusion of capital gains in income for tax purposes, reductions of certain corporate capitalization, and depreciation preferences.

As far as stabilization policy is concerned, reducing the debt-to-GDP ratio and the real deficit should not preclude a stabilization role for fiscal policy in the event of a slump. Given the problems of discretionary countercyclical policy, however, it would be better for the government to rely heavily on automatic stabilizers. In this connection, it is noteworthy that the net result of recent fiscal changes, such as the PIT reform — which reduced the number of tax brackets — and the introduction of the GST — which includes services (which are less cyclical than manufactured goods) in its base — is likely to be a dilution of the automatic stabilization of the fiscal system.

Other developments — the reduction of tariffs under the General Agreement on Tariffs and Trade and the Canada-U.S. Free Trade Agreement — have added to this effect, since import duties are very cyclically sensitive. Therefore, the federal government should examine ways of intensifying the automatic stabilization of the tax system. The full refundability of tax losses would be one eventual means toward this end.

The budgetary process has improved markedly in recent years. The government's commitment to table annual budgets between mid-January and mid-February was a key innovation, and should be rigidly adhered to. The pre-budget consultation process has also been improved. The elaboration of five-year fiscal plans with budgets has been continued; the presentation of spending Estimates that are more directly comparable to these plans would be a large additional step forward.[25] These developments have enhanced the predictability of policy and the accountability of government, and should be built upon.

Accountability with respect to both spending and taxation would be improved by more complete information on the overall impact of government programs directed at specific groups. The estimation of trajectories of existing program areas, such as elderly benefits, is made difficult by a lack of information: figures on budgetary expenditures give only an incomplete picture, since elements such as the age and pension credits and the new tax-back of OAS and family allowance payments are not reflected in the figures for outlays. The federal public accounts currently provide details on selected "tax expenditures" — child tax credits, sales tax credits, and the investment tax credit — in notes to the financial statements; accountability would be better served by more systematic presentation of the net costs of various program groups, taking expenditures, "tax backs", and "tax expenditures" into account.

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25 For comments by the Auditor General on the desirability of preparing the Estimates in accordance with the accounting policies used in the public accounts see Canada, Auditor General, *Report*, pp. 52–58.

A significant improvement in recent budgets has been the addition of tables showing the sensitivity of fiscal outcomes to changes in economic growth and interest rates. Comparable estimates of the potential impact of various long-term developments on existing programs, such as elderly benefits, or emerging ones, such as child care, are not an unreasonable thing for taxpayers to ask for — in fact, they should demand them.

The question of accountability is central to the issue of inflation-induced increases in taxation. The loss of revenues that indexation of the PIT system causes should be made up by increases in income tax rates — increases that would have to be justified to Parliament and to voters.

The government must also continue to make itself accountable for the consequences of deficit financing. Canada embarked on its current high-deficit path without any public discussion of the strain of debt servicing in a high real interest rate environment. Yet such costs should be an important factor in the choice between taxing now or later. As long as real interest rates remain at current high levels, it is hard to justify deficit financing of any program spending other than for stabilization purposes.

How to Begin

A key immediate challenge is the replacement of the FST by a new GST. The Institute has a number of concerns with the GST as it is now designed: in particular, we would have preferred a broader base (including food) and a lower rate; and we would have preferred a combined federal-provincial tax. But even with these shortcomings, the Institute views the GST as vastly preferable to the FST.[26]

Even before this, the next budget must make large strides toward a sustainable path for the deficit and the debt. As was

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26 See Robert D. Brown, *The Other Shoe — The GST: Stage Two of Tax Reform*, Fiscal Policy Monitor 3 (Toronto: C.D. Howe Institute, November 1989).

indicated earlier, the Institute feels that an appropriate course would involve improving the primary balance by an average of some $4 billion annually from the targets in the April 1989 *Fiscal Plan*.[27] A variety of options are available for this task. Spending cuts are certainly preferable to tax increases in efforts to reduce the deficit. It is important to realize, however, that in the short term, there are limits to what can be achieved on the spending side alone. Higher taxes — at least in the short term — will be hard to avoid, despite the fact that the replacement of the FST with the GST will eliminate a serious source of tax-base erosion. Table 4 presents alternative packages, one providing a 50–50 split between expenditure cuts and tax increases, the other putting some two-thirds of the weight on the spending side.

The call for cuts in non-"entitlement" grants to persons and organizations (1988 total: $2.3 billion) reflects the Institute's view that a substantial proportion of this spending is inconsistent with broadly supported public policy goals.[28] Agricultural subsidies (1988 total: $2.7 billion) are already scheduled to be reduced; it appears likely on current evidence, however, that a large part of the government's annual unallocated reserves will again be directed — inappropriately — toward *ad hoc* payments to farmers.[29] Savings in nonagricultural subsidies (1988 total: $3.4 billion) can be obtained by continued reductions in busi-

27 A straight comparison of the Institute's recommendations with the April 1989 *Fiscal Plan* suggests a relatively small adjustment in the deficit in fiscal year 1990/91. However, the 1989 plan did not factor in the impact of the GST on the deficit, which, *in the short term*, is likely to be large and negative. For this reason, we focus on the larger $4 billion figure in these recommendations.

28 Dollar amounts quoted in this paragraph are calendar year figures, on a national accounts basis.

29 In the event that reform of trade policies in the dairy sector is not forthcoming, subsidies in this area should also be trimmed. As the Organisation for Economic Co-operation and Development (OECD) noted in its latest review of Canada, "it is surprising that the Canadian Dairy Commission grants large subsidies (C$279 million in 1987), when producers already benefit from a captive market and domestic prices roughly three times world levels" (OECD, *Canada*, OECD Economic Surveys [Paris: OECD, 1989], p. 82).

Table 4

Two Ways to Improve the Primary Balance by $4 Billion
($ billions)

	Option 1: 50% Spending Cuts, 50% Revenue Increases	**Option 2: 67% Spending Cuts, 33% Revenue Increases**
Spending Cuts		
Grants to persons & organizations	0.3	0.5
Support for agriculture	0.6	0.7
Subsidies	0.4	0.5
Capital assistance	0.2	0.3
Transfers to provinces	0.1	0.1
Defense	0.2	0.3
Operations of government	0.2	0.3
Total	*2.0*	*2.7*
Revenue Increases		
1 cent tobacco excise tax increase	0.5	0.5
Gasoline excise tax increase	0.6 (2 cents)	0.3 (1 cent)
Personal income tax increase	0.7	0.3
Higher airport & port revenues	0.2	0.2
Total	*2.0*	*1.3*

Source: C.D. Howe Institute.

ness subsidies delivered through ERDAs, by trimming support for Crown corporations with a strong commercial focus, and by cutting spending on energy megaprojects. It should be possible to reduce transfers to the provinces and territories — excluding CAP, equalization payments, EPF transfers, and payments related to taxation agreements (1988 total: $2.8 billion) — by rationalizing the numerous, uncoordinated payments that a large number of federal departments make. Some savings in the defense budget (1988 total: $10.5 billion) could also be achieved; if changes in Eastern Europe appear to make

a reduced Canadian effort in Europe appropriate, cuts beyond those shown in Table 4 could be made. It is likely that cuts in these areas could produce further savings in general government operations without additional special measures, although continued scrutiny of this area is necessary.[30]

On the revenue side, the options presented reflect the Institute's view that, particularly in light of the scheduled introduction of the GST in 1991, tax increases should be largely limited to "sin" taxes. Further tax revenues can be found in the personal income tax: aside from outright rate increases, the government might consider targeting some "social" tax credits, or taxing lottery and racetrack winnings. It might also obtain increased revenues from ports and airports, areas in which federal involvement serves no compelling purpose, and whose viability as commercial enterprises is distinctly possible.

An economic performance that is out of line with expectations obviously has implications for the fiscal plan. While detailed examination of contingencies is not possible here, two general observations should be made. First, any "fiscal dividend" arising from better-than-expected growth must be applied to the deficit — when fiscal policy is on a thin line between sustainable and unsustainable paths, spending windfall revenues would be irresponsible. Second, any slippage as a result of a slowdown or a recession must be treated as a setback to be made good later.

Indeed, it is in this spirit that the fiscal plan set out here is presented. The buildup that preceded the April 1989 budget was extraordinary: the fact that debt-service costs were running way above target was broadcast throughout the country, and the public was ready for a very tough budget. In retrospect, the whole exercise had a somewhat unreal air. The deficit was allowed to rise, and behind the higher debt-service costs and

30 For example, in his recent *Report*, the Auditor General identified substantial potential savings in telecommunications costs (Canada, Auditor General, *Report*, pp. 147-155).

higher taxes lurked the embarrassing fact that program expenditures were also allowed to drift up from the targets set in the previous fiscal plan.

This slippage must now be made good. Time is not on Canada's side: at current interest rates, a $30 billion deficit adds some $3 billion to interest costs in perpetuity. Greater fiscal stringency will enable Canada to break out of the vicious circle of fiscal and monetary policies that work at cross-purposes, by easing the Bank of Canada's task of fighting inflation and permitting lower interest rates that will bring the deficit down still further. The sooner this problem is decisively addressed, the faster other fiscal reforms will rise to the top of the political agenda and the sounder Canada's long-term fiscal environment will be.

6

The Environment and the Economy

Thomas E. Kierans

Introduction

Sometime this spring, the federal government will table its long-awaited review of environmental policy issues, including some specific initiatives. This chapter explores some of the fundamental principles that must be established before a Canadian policy framework can be erected. The focus will be on the future, and will emphasize the issues that the environmental challenge raises for sustaining the prospects for economic expansion. While the international dimension is important, since Third World population and pollution trends could obliterate the environmental efforts of the industrialized countries, it is beyond the scope of this exercise.

Designing an environmental policy framework is an extraordinarily complex task, mainly because of the tensions that exist between the objective of economic growth and the goal of environmental sustainability. On the one hand, Canadians have come to understand that the effects of economic develop-

ment have not always been environmentally benign and that some can be extremely serious. On the other hand, while many may be prepared to make some sacrifices, few seem prepared to forego the benefits of a thriving economy and the personal and social opportunities that derive from it.

Uncertainty complicates the task of policymakers. Science cannot state definitively that certain polluting activities will cause cumulative, irredeemable, and disastrous harm to man's place within the earth's ecostructure. For example, the "greenhouse effect" remains conjectural. Science can indicate that prudence dictates the need for, say, specific emissions cutbacks, but it cannot generate appropriate risk profiles for societies — choosing among an array of options — when the economic tradeoff is real, but the environmental outcome is unknowable. The amalgam of these factors truly constitutes a "wicked problem" for policymakers, where "(1) the goals are not known or are very ambiguous and (2) the means-ends relationships are highly uncertain and poorly understood."[1]

Thus, the contentious issues of tradeoffs and society's risk profile in an environmental policy framework must be addressed right up front. How much "environment" do Canadians want? At what cost? At what risk? With what dislocation to the economy? Meeting the environmental challenge could bring more economic dislocation than, say, the Canada-U.S. Free Trade Agreement or the energy crises of the 1970s. Some believe, however, that mankind is engaged in a lethal game of Russian roulette with the earth's atmosphere and that radical actions are needed now.

An environmental policy framework must also contend with the matter of who decides environmental standards. For some, the environment is simply a "property-rights" issue, which can be resolved outside government. In the C.D. Howe Institute's view, however, the environmental challenge has a distinctive-

1 Gilles Paquet, "A Social Learning Framework for a Wicked Problem: The Case of Energy," *Energy Studies Review* 1 (1989).

ness that mandates government intervention, to establish some of the tradeoffs and to influence market behavior. But markets are also important to the process, since, in many cases, they can achieve society's goals more efficiently than traditional "command-and-control" regulatory methods, once the tradeoffs are established. Efficient methods produce superior results.

Finally, there is the problem of establishing and sustaining consensus within society, among the many contending groups with specific interests in environmental issues (the "stakeholders"). This may pose the biggest challenge of all.

Building Consensus

In the aftermath of the first oil price shock, U.S. President Jimmy Carter exhorted Americans to sacrifice — to conserve energy and to bear the substantial costs of new government energy programs. Unfortunately, he characterized the challenge as "the moral equivalent of war." Most Americans did not agree. Hence, in that instance, melding the public purpose with the private interest was doomed from the start, since few were prepared to pay so high a price to meet the energy challenge.

Today, however, some who assess the environmental challenge have a view similar to the former president's. They believe that the environment is signalling the limits to economic growth and that nothing less than a reordering of the value system is in order. Specifically, they would assert "that ecology is more fundamental than human wants and needs."[2] And "they question whether economic rationality is an appropriate principal basis for technological, political, and consumer decision-making."[3] These are unnerving notions in a liberal, pluralistic democracy, illustrating the difficulties attendant on

2 Robert C. Paehlke, *Environmentalism and the Future of Progressive Politics* (New Haven, Conn.: Yale University Press, 1989), p. 148.

3 Ibid., p. 211.

the search for consensus. Some stakeholders may not be contemplating any tradeoffs at all because, for them, the environmental challenge is the moral equivalent of war.

These observations suggest two factors that should influence the policy formulation process from the outset.

The first is the need for policymakers to temper their rhetoric. Whatever policy set is selected, improvements will come slowly, at great expense, and with considerable potential for dislocation. Inflated expectations destabilize and dashed expectations demoralize.

The second is the need for specificity of language. For example, "sustainable development" does not mean the same thing to each and every stakeholder. For some, "sustainable" precludes any development, in a great many instances. For others, "development" means calculating the transformation of the environment, establishing an acceptable risk profile, and mitigating environmental damage. The politics of the environment, therefore, appear to be consensual, since most perceive that there is an environmental problem and that "someone" should do "something" about it. But it really is not consensual; reality and perception will not converge until the costs and tradeoffs associated with the objectives — now only dimly perceived — are reconciled.

The role of the market economy also needs to be clarified. For the Institute, markets are a means by which society, establishing its environmental values, may achieve its goals. Markets are one instrument of policy among many that can be used to meet the environmental challenge. To treat them in any other way is to invite either their aggrandizement, relative to the problem, or their dismissal, as part of the solution. Neither extreme is a constructive approach to this process.

Consensus will be difficult; indeed, it may be impossible to achieve. Most Canadians want both an improved environment and improvements in the institutional processes that affect the environment. This means that people most involved with the

environmental challenge have a common cause: to make things better. But, as improvements occur and as the marginal costs of incremental improvements become evident, real philosophical differences will emerge. As is discussed below, however, the longer government can sustain consensus, the more rapidly Canadians will adapt to the environmental challenge — an end in itself.

Growth and the Environment

Environmental degradation is regarded in some quarters as the by-product of economic growth, technological arrogance, and market failures. However, none of these relationships necessarily holds.

Since the industrial revolution, man's impact on the environment has been increasingly pervasive. Impact, however, can mean pollution and destruction — which is the result of indifference or ignorance — or deliberate transformation. The intrusiveness of the relationship between economic growth and environmental impact has waxed and waned. For example, the worst industrial and urban excesses of the Victorian era have been mitigated; yet, today, individuals' peference for automobile transportation threatens even graver damage. While society at last seems prepared to mobilize to reduce the destructiveness of its impact on the environment, its ability and its determination to affect the environment — albeit in a more sensitive and deliberate manner — remains intact.

The historic relationship between economic growth and destructive environmental effects is not immutable. The enhancement of one need not be achieved at the expense of the other. Indeed, under the present system of economic accounting for national incomes, such hidden costs of production as environmental depreciation — including air quality and its effects on health — are not even taken into consideration. Yet, the quality of the environment constitutes a significant com-

ponent of Canada's available resources. Hence, by other, more comprehensive measurement standards of Canadians' well-being, when the environment is degraded, both current incomes and future prospects are depreciated. This explains why, at various times, industrial societies have acted to clean up rivers and reduce smog, even though conventional economic measurement standards might have indicated that their citizens had never been better off. Arguably, this measurement failure is at the root of much of the environmental challenge.

Among the arguments that society's choices in meeting the environmental challenge are not reduced by its commitment to an expanding economy, three merit discussion.

First, the environment historically has been an underpriced resource. No one has been completely willing or able to assume jurisdiction over this important social capital component. As a result, users in many cases have had a "free ride," being neither regulated nor charged for its consumption. Not surprisingly, therefore, society's capital infrastructure has been tailored to maximize the use of this "free resource," while minimizing other costs. This is hardly an irretrievable situation. As society develops the institutional and market mechanisms needed to price and regulate the use of the environment appropriately, markets will adapt — reflecting the costs of using this resource and reallocating other resources — and the environment will benefit.

The effect, then, if corrective measures were suddenly applied to Canada's environmental practices, would be similar to that of, say, an oil price shock. At the outset, everyone would be less well off (at least by conventional economic measurements). Eventually, however, the system would adapt as substitutes are found and as new processes and technologies are introduced. After that phase, economic growth would resume, perhaps even more vigorously than before.

Second, economic growth is not just a function of how Canadians utilize today some static inventory of their resour-

ces. It is also determined by how they respond and adapt to new stimuli by substituting, by developing new technologies, and by utilizing different resources. Canada has undergone such transformations in the past; there is no reason to assume it cannot do so again. From Malthus to the energy "hoarders" of the 1970s, alarmists have underrated the interactions among prices, technologies, efficiencies, and substitution effects. For example, the development and application of improved agricultural technologies led to the "green revolution" and to "embarrassing food surpluses in some regions or countries, formerly regarded as famine prone."[4] Similarly, the oil price shocks of the 1970s led to substitution and efficiency measures that continue to be implemented today, despite a significant downturn in oil prices. Any future (and problematic) oil price shock would, therefore, be much less likely to have as heavy an impact on the industrialized economies.

Third, the stimulus to uncouple the historic relationship between growth and environmental impact is at last present. The jobs *versus* the environment tradeoff is no longer so stark. The wealth of the industrialized economies permits the "luxury" of a transition phase to a cleaner environment. And, as the evidence of environmental costs begins to mount alarmingly, society should be more prepared than before to absorb the costs and to price appropriately the use of this resource. The unseemly tug-of-war among shortsighted politicians, businessmen, and consumers appears to be giving way to expanded horizons. This is important, since it means that society can respond to the environmental challenge in an orderly and decisive fashion. It should also allow the economy to adapt faster and permit renewed concentration on growth opportunities.

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4 Harry G. Johnson, *Man and His Environment*, British-North American Committee 10 (Montreal: British-North America Committee, 1973), p. 19. For the general reader, this is one of the most accessible and comprehensive surveys in the extensive economic literature on the environment.

Thus, a vastly increased sensitivity to environmental issues need not deflect society from its commitment to a growing economy. Internalizing the costs of "using" the environment will alert markets to allocate resources differently. And prices and markets will interact to develop new technologies that can be more environmentally benign and economically efficient.

Perhaps most important, however, is the current public consensus underpinning the political will to encourage change. This is crucial, since, as was the case with the oil price shock, the sooner society can coalesce and adapt, the less dislocation it will ultimately experience. The more rapidly Canada accommodates technologies that are both economically and environmentally superior, the more readily it will be able to stay competitive, minimize dislocation, and avoid protectionist reactions from special-interest groups, while benefiting from much-improved environmental practices. Experience suggests that the willingness to accommodate change swiftly permits restoration of a per capita economic growth potential at least as great as that before. There is no reason to believe, in this instance, that history will not repeat itself.

Growth and the Environmental Challenge

The ability to achieve a growing economy — correcting past excesses and proceeding by regulating and costing potential environmental damages — may not, however, be a satisfactory tradeoff for all stakeholders. For some, the issues turn not just on how much damage should be absorbed, but on whether man should have any significant impact on the environment at all.

Central to the concerns expressed about growth are fears that the present generation will bequeath a depleted resource base, particularly an irremediably deteriorated environmental quality of life. These concerns have the effect of placing environmental goals above other societal goals — in effect hoarding,

or pricing the use of the environment "out of the market," leaving other objectives to seek tradeoffs within a diminished resource base.

In 1987, the World Commission on Environment and Development, chaired by Norwegian Prime Minister Gro Harlem Brundtland (the Brundtland Report), acknowledged the tension between growth and the environment, and proposed that reconciliation be found through the evolving concept of "sustainable development," described not as a fixed state of harmony, but as

> a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are *made consistent* [emphasis added] with future as well as present needs.[5]

By blending the words "sustainable" and "development," the Brundtland Report allowed parties, at varying points on the policy spectrum, to rally around a common goal. A consensus among stakeholders, it seemed, was at hand. Not so. Too much attention, it transpires, is being paid to the phrase "sustainable development" and too little to the words "made consistent."[6] During the Energy Options process,[7] a broadly participatory exercise initiated by the federal government, significantly in-

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5 World Commission on Environment and Development, *Our Common Future, Report to the United Nations General Assembly* (Oxford: Oxford University Press, 1987), p. 9.

6 Drawing on ideas developed by Amory Lovins and others in the United States, an extensive Canadian body of work dealing with alternatives approaches to the environmental future has developed. In particular, see David B. Brooks, John B. Robinson, and Ralph D. Torrie, *2025: Soft Energy Futures for Canada*, Vol. 1, *National Report* (Ottawa: Department of Energy, Mines and Resources, February 1983). "Soft energy path" analysis relies on backcasting, as opposed to forecasting. It postulates the desired future and then analyzes the means by which it may be achieved. The approach is explicitly normative.

7 See Energy Options Advisory Committee, *Energy and Canadians into the 21st Century: A Report on the Energy Options Process* (Ottawa: Supply and Services Canada, 1988).

fluenced by environmentalists, and widely attended by industrialists, the unsatisfactory nature of the "bridging" phrase was revealed. Fundamentally, the issue turns on "the great question, whether man is of nature, or above her."[8]

Man traditionally has regarded the earth and its environment as his to transform as he sees fit, providing that he undertake this stewardship wisely. Thus, progressive business, acknowledging the evidence of environmental degradation, seems prepared to accept society's insistence on the wiser conservation of resources — now defined to include all capital, including the environment. However, the commitment of business is based on technological optimism and assumes continuous, albeit calculated, changes to the environment and the ecostructure. It does not countenance the notion of hoarding resources.

Many environmentalists, on the other hand, deeply distrustful of the economic growth ethic, believe man is both careless and uncomprehending of the harm he does to the ecostructure. Some also tend to see technology as part of the problem, not as part of the solution. They portray technologists, who have developed processes without taking account of their environmental impact, as insensitive and overoptimistic. Therefore, as the environmentalist David Brooks puts it,

> sustainable development will ultimately be seen to preclude any increase in energy consumption, and thus any need for a larger energy industry. As the earth's atmosphere is now telling us, there are limits to growth, at least to growth as represented by materials throughput.[9]

Or, indeed, as Brooks has argued elsewhere, "an environmental perspective and policies must seek to create a *preferable* world and *real political and moral choices are involved*" [Emphasis added].[10]

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8 Pachlke, *Environmentalism*, p. 286.

9 As quoted by Pachlke in ibid., p. 121.

10 See David B. Brooks and Alma Norman, "A Question of Choice," *Alternatives: Perspectives on Society and Environment* 3 (Winter 1974): 4–12.

It is not always clear whether environmentalists are pressing for the imposition of a hierarchically ranked set of values, or merely predicting one emerging as the inevitable outcome of a growing awareness of impending environmental disaster. Either way, such notions are disturbing in a pluralistic society, where the many compete for the acceptance of their different truths, abrogating the freedom to impose their singular concept of truth upon all. In any event, it is evident that the debate over the limits to growth will be characterized by fundamental philosophical differences.

What is also clear is the scope of the challenge posed for government, which must, in the end, try to determine the socially optimal tradeoff point between how much and what kind of growth Canadians want, and the extent to which Canadians may affect the environment, today and in the future.

The Significance of Growth

The problems with a "no-growth" scenario, or with some rearranged economic structure distinguishing among what constitutes "good" and "bad" growth, may be summarized as follows.

First, a no-growth scenario is inflexible when dealing with the other societal goals of a liberal democracy. Considerations of social justice and distributional equity also rank high on Canadians' value spectrum, and it is not at all clear how these might be sustained under an alternative economic policy set. These are now met through a combination of government-to-government transfers — such as equalization payments, enshrined in the Constitution — transfers from government to individuals, and a commitment to economic growth and opportunity made in the context of enduring government deficits.

From an egalitarian viewpoint, economic growth does not guarantee a narrowing of wealth and income-distribution profiles. But it does permit an improvement in living standards for

all — through the redistribution of incremental income gains and the enhancement of labor-market opportunities. As well, and crucially important, it expedites income mobility, affording equality of opportunity.

Presumably, if the affluent permitted, much-expanded redistribution programs might reduce some of these concerns, at least on a "one-off" basis. It is difficult to conceive, however, how a no-growth, high-redistribution scenario would sustain itself, much less enjoy the support of a population, at all income levels, frustrated by the diminution of choice and opportunity, and weakened by disincentives to work and to assume responsibility.

A second problem with the limits-to-growth hypothesis is its concomitant distrust of technology and technological advances, endemic in the environmental ethos. In some ways, this resembles the difficulty some people have with the counterintuitive notion underlying the market economy — namely, that individuals, operating freely and in their own interests, will maximize the interests of society as a whole. So, there is confusion about the idea that technology is the bridge between a static set of resources and a dynamic future, with a kaleidoscope of positive possibilities. Together, technology and markets reinforce each other, a classic example of "one hand washing the other." While neither is an unqualified proposition, detractors and technological pessimists seem misguided.

Signals sent back *via* the pricing system continuously alter technological developments through increased investment, which produces new means of enhancing supply, substitutions, innovative alternatives, and conservation — thus frustrating those who have predicted starvation or depleted natural resources. The same principle applies to "running out" of the environment. As discussed, price and regulatory mechanisms sent back the wrong signals in the past and technology responded accordingly. But there is nothing inexorable about that relationship. Technology is the bridge between the

present economy and that of the twenty-first century — which is likely to be both vibrant and environmentally more benign.

Admittedly, technological development takes time and involves risk. And much time has been lost. However, technologies already exist that — while not in widespread use — are environmentally, if not economically, more efficient. Some are both and others, in the development phase, will be both.

Also, the incidence of environmental stress has not gone unnoticed by those preparing the private sector's capital expenditure programs today. Investment is already adapting, not just to today's environmental milieu, but to the anticipated regulatory and pricing arrangements expected in the future. To do otherwise would be economically irrational.

Because technology sometimes has contributed to environmental degradation in the past, there is no reason to assume that, with proper pricing signals, it will not augment the environment in the future. Indeed, it is crucial to emphasize that a no-growth scenario would tend to freeze us into the acceptance of existing technologies, which would be environmentally less desirable, even at lower output levels, than the alternative of developing and adopting new technologies at higher levels of economic activity.

Sustainable Development and the Socially Optimal Environment Policy

A modern industrialized economy such as Canada is complex and offers a kaleidoscope of optimistic possibilities because of the options technology affords. No longer are Canadians faced solely with the static possibility of "using up" a resource and thereby forced to hoard it, as sustainable development implies. Rather, there is the option of converting that resource, or taking the current wealth that it represents, and transforming it into a more valuable social good. By so doing, the availability of one

resource may be diminished, but the totality of all resources available to society may be enhanced.

Sustainable development, then, is not about hoarding, regardless of cost — not the least of which are the costs of imposing some normative view of what the economy and the environment ought to look like. Rather, it is about managing all existing resources in an economically efficient manner, so as to provide future generations with the capital, education, technology, environment, and, indeed, the total resource base to generate a standard of well-being, including environmental well-being, per capita as great or greater than today.

To overprice the environment, or to use economically inefficient methods to preserve it, is to remove the capital needed to pursue other social goals, such as distributional equity, educational opportunity, or perhaps even a faster rate of environmental improvement. In other words, to err in dealing with the environmental challenge is to do so at a meaningful cost to society. Hence, a socially optimal environmental policy recognizes that, throughout history, man has been transforming his environment, refusing to accept its limitations. Sustainable development, then, must be seen in this context — that man will continue to change the world around him, albeit in a more deliberate and sensitive manner.

An environment unaffected by man is neither feasible nor desirable, since to avoid doing so would compromise other social goals. Therefore, society will pay to minimize the effects of its activities on the environment, but not beyond the point where the totality of its resources — including the environment — is diminished. At that stage, society will learn to live with and adapt to the consequences.

These, then, are the tradeoffs. Implementing them in today's social and economic framework, however, is exceedingly complex. On the one hand, a mandatory hierarchical ranking of society's values is anathema in a pluralistic democracy. On the other, a complete reliance on unfettered markets to ar-

bitrate among society's goals is simply not feasible for two reasons.

First, the environment is a common-property resource, and selected private bodies cannot, in many instances, reflect the interests of all who may have a stake in the outcome. Second, the environment is not simply the property of existing stakeholders but of future generations, whose interests may be compromised by decisions taken today. Since markets may indeed fail to protect the interests of future generations, it seems reasonable to examine whether government has a role to play in mitigating this outcome.

Property Rights and the Role of Government

The argument is sometimes made that the environment is simply a property-rights issue. In other words, if those benefiting from its use were simply to negotiate with those disadvantaged, the private, competitive market would bring the problems of one party — overusing shared properties at the expense of others — under appropriate control.[11]

The usefulness of this insight is significant, since it affords the basic framework for selecting the right *instruments* to deal with the myriad separate problems posed by the environmental challenge. It is not so helpful, however, when it is extrapolated to argue against *any* role for government at all.

To illustrate, take the simple case of one pulp mill polluting the water of only one community downstream. The parties to the "transaction" can be clearly identified, so there may be no need for government intervention. If the pulp mill has the right to pollute, the community will either "bribe" it not to pollute, or install water-purification facilities at its own expense.

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11 Ronald H. Coase, "The Problem of Social Cost," *Journal of Law and Economics* 3 (October 1960): 1–44.

Alternatively, if the mill is legally enjoined not to pollute, it will either invest in a waste-treatment plant or pay the community to build purification facilities. In either case, through private bargaining, *the negotiated costs would tend toward the same level.* However, since other benefits — such as employment — are associated with the polluting pulp mill, the cost of using the environment will be less than the cost of restoring the stream's water quality to its pre-mill level, assuming the mill was forced to close. Hence, the socially optimal charge for the use of the environment is less than the gross cost of a perfect clean-up. This is the tradeoff private parties are prepared to make.

In the real world, however, property rights cannot be defined in so all-embracing a manner, for a number of reasons. First, technologies and development entail risks that may not be apparent or quantifiable until much later, when the unforeseen costs may exceed the capacity of one or both parties to pay. Second, today's effects on the environment may affect the next generation's ability to absorb them or to sustain a total resource base as great, or greater, than that enjoyed today. Yet, producers and consumers tend to adopt narrower perspectives and shorter time frames, concentrating only on their immediate tradeoffs, sometimes permitting cumulative impacts on society as a whole or over the very long term. Third, the ability either to identify the "free-riding" beneficiary of an interregional or international commons, such as the atmosphere or the oceans, or to isolate those disadvantaged may, in important instances, be nearly impossible. Finally, the costs — in terms of identification, litigation, and so on — of bringing the parties together may be insupportably high.

Without correction, then, markets may fail, requiring government intervention to prevent society's costs of excessive environmental consumption from rising too high. But for government to do this well may prove excruciatingly difficult. In setting standards, government must not only prepare cost-

benefit analyses to determine the socially optimal level of pollution, but, working with science, it also must make informed judgments as to the risk profile that society is prepared to accept. Then it must select the most efficient mechanisms with which to enforce standards. And, as was evident from the simplified case of the pulp mill and the community, these costs may be borne by all of the participants, not just by the polluter. Selecting the appropriate policy instrument, therefore, is far from a straightforward proposition.

For these reasons, the superficiality of the public discussion of the environment thus far is a matter for concern. The notions that something must be done, that government ought to exert more influence, and that the "polluter must pay" are simplistic and trivialize the profoundly complex nature of the challenge.

For government, the essence of the problem lies in the fact that, under the simplified property-rights scenario, individuals can decide for themselves on the optimal course, with or without complete information or absolute certainty. With the best information at their disposal, individuals will comprehend that there are unknowns and that there may be risks inherent in the new technologies installed in the pulp mill or in the community water-treatment system that cannot be quantified for a long time. They will also know that their decisions may complicate matters for succeeding generations. But, as did their forebears, they will assume what risk profile they think best, trusting to the future to deal with the unforeseen, as did they. Clearly, most individuals will opt to assume some degree of risk in arriving at their perception of the appropriate tradeoffs among the environment, growth, and their responsibility to future generations. So man progresses, sustaining the prospect for continued betterment.

The need to involve government, however, enormously complicates the decisionmaking process. For example, if individuals were charged with dealing with those aspects of the

environmental challenge that affected them alone, they would not require scientific certainty in adopting new technologies. Nor would they insist on exhaustive research into every conceivable possibility, knowing that such processes would lock them into old technologies and, given the need to reduce environmental impacts, almost certainly into a regressive economic pattern.

But government behaves differently. It must respond to a broader constituency than those immediately involved. Given the ripple effect of certain environmentally damaging activities, that is not necessarily a bad thing. Further, given the pervasive consequences of irretrievable losses (the extinction of species) or of cumulative effects (the greenhouse effect and the destruction of the ozone layer), it is entirely appropriate that society as a whole, including future generations, be given "standing," at least in certain instances. The socially optimal environmental policy, then, is not necessarily the same as that which private parties would strike. Therefore, the standards set by government may be higher.

Throughout, however, it is imperative that government never lose sight of the fundamental process for which its institutionalized arrangements are but a proxy — namely, that individuals will be risktakers and will accept tradeoffs, on behalf of themselves and future generations. This is the essence of progress, whereby man enhances not only his present stock of total resources but future stocks as well. If institutions do not account for that proclivity, they will fail in the attempt to grapple with the environmental challenge while advancing economic well-being.

Admittedly, however, this is easier said than done. At the current stage of the environmental debate, many are not prepared to accept that the cost of eliminating, for example, the last 5 percent of pollutants from a polluting process — which may exceed the cost of avoiding the first 95 percent — simply is not worth it. In many instances, others refuse to

countenance any development risks at all, preferring arrested activity and endless study. In the final analysis, therefore, government's greatest challenge lies not only in establishing the socially optimal environmental policy but in managing a consensual process whereby the politics of the environment can be merged with its economic reality. Only in this way can Canadians respond to the environmental mandate as swiftly and as efficiently as possible, enhancing innovation and preserving the opportunity for growth.

Markets and the Environment

In framing an overall environmental policy set, government must also ensure that the appropriate measure of scientific enquiry is undertaken; that proper standards are established and adhered to; that other market failures do not preclude long-term technological research, development, and demonstration efforts; and that the learning framework for dealing with this "wicked problem" is as open, interactive, dynamic, and responsive as is possible. In each of these instances, a "public good" — that which generates more benefit for society than could be realized by a private individual or firm — is created, and it is entirely appropriate for government, absorbing a public cost, to lead and encourage participation by the private sector.[12]

Government has a plethora of instruments at its disposal to face the environmental challenge, once goals are fashioned. It is crucial, however, that policies be implemented in the most efficient fashion. And, in far more cases than seems generally realized, markets offer the best means of achieving desired goals. Because current environmental problems are sometimes

12 None of which is to suggest that historic government imbroglios in scientific and technological research, development, and demonstration need be repeated. For one assessment of government initiatives in science and technology, see Donald G. McFetridge, "An Evaluation of Government Energy R&D Activities" (paper prepared for Energy Options, December 1987).

the result of market failures does not infer that market mechanisms cannot perform more effectively, once the proper incentives are designed.

A conventional response by government to the need to reduce environmental harm is the command-and-control approach, instituted by ordering specific polluters to stop, by setting regulations, by imposing uniform standards to deal with each type of pollutant, and by fining those who transgress. Generally, pollution taxes are imposed in an apparent effort to internalize the costs of using the environment, which the pricing system fails to reflect. More often, however, fines will reflect pragmatically the bureaucratic costs of administering the command-and-control approach. As such, they may be set too low and thus fail to stimulate change and improvement.

In many instances, the command-and-control approach is not be the way to go, for a variety of reasons. First, it tends to "grandfather" existing sources of pollution, keeping them in production longer than would otherwise be the case — thus exacerbating the problem relative to alternatives and diminishing the urgency of finding solutions. Second, uniform standards tend to be set at the level of the lowest common denominator to accommodate the maximum level of employment possible. Third, the process is frequently dominated by the lethargy of the bureaucracies administering such systems, not by the dynamism of a motivated private sector. Finally, it is an inefficient approach, since none of the funds (taxes and fines) raised are directed to finding economically efficient ways of reducing environmental harm.

Most important, this approach ignores the fact that the control costs of reducing specific pollutants vary from source to source. Yet, it is in that variance that the true dynamic is to be found. Since it will be very costly for some to achieve a uniform standard, that standard may be set higher than is collectively achievable otherwise. This is because of the hardship that high-cost polluters (and their employees) would endure

and because of the lack of incentive for low-cost polluters to go below the uniform standard, when they could afford to do so. In these and other instances, market-based mechanisms serve environmental goals better.

By way of example, the Montreal Protocol — an international agreement setting standards for reducing emissions of chlorofluorocarbons (CFCs) and halons, believed to be depleting the ozone layer — provides an excellent demonstration of a market-oriented approach.[13] For the purposes of this discussion, the significance of the Protocol is twofold.

First, it does not mandate uniform, proportionate, across-the-board reductions in the quantity of CFCs. Rather, it includes a schedule for reducing overall consumption of CFCs to 50 percent of 1986 consumption by 1998–99. The Protocol contains no specific regulation of particular CFC emissions, on a process-by-process basis; instead, it targets the overall ozone depletion potential (ODP) of CFCs consumed. Accordingly, the Protocol's signatories are able to choose among a menu of control options, provided only that they meet their country's ODP reduction requirements.

Second, Environment Canada has indicated that it may permit a system of transferable allocated rights, allowing producers *and users* of CFCs to emit certain and limited amounts consistent with total reduction targets. This would motivate those able to maximize their reductions to do so quickly to capitalize on their unused rights. Rights would be then reallocated on the basis of market forces. This would further stimulate the search for economically efficient substitutes, since technologies developed could be leased, closing the circle among technology, markets, and economic-growth considerations.

It is worth reinforcing the point that market mechanisms can recycle the capital generated by an environmental problem

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13 For an extended discussion, see Douglas A. Smith and Keith Vodden, "Global Environmental Policy: The Case of Ozone Depletion," *Canadian Public Policy* 15 (December 1989): 413–423.

without relying on government as a conduit. This assures that the search for economically efficient answers will be vigorous and multifaceted, mobilizing many approaches, employing participants who might not otherwise be involved, and permitting technology to play its key bridging role to an environmentally more benign future. From such an approach, generally, the optimum solutions will materialize.

In fact, however, the possibilities for market mechanisms transcend the significant advantages of polluters' trading credits among themselves.[14] As was seen with the pulp mill example, private negotiations may lead to one or both parties' bearing pollution costs. And the costs borne by the "aggrieved" party of avoiding the insupportable burdens of polluters will sometimes tend to equal those borne by the beneficiaries of those using the commons. Hence, the simplistic notion that only "the polluter pays" ignores the fact that the aggrieved may also be the beneficiary of polluters' activities. The aggrieved, then, can also be participants in the market for "pollution rights".[15]

Then consider cottage dwellers, who want both electricity and acid-free lakes. Cottagers, too, could acquire polluters' emission rights, limiting their supply, increasing their price, reducing emissions, and invigorating polluters' and others' search for economically efficient, alternative processes. This makes possible the creation of a far broader market in "pollution rights," enhancing competition, driving down transaction costs, and improving the efficiency of the policy instrument.

This broadens the possibilities for market mechanisms, instead of merely trading credits among polluters, to include those purchasing the products of polluters and those who,

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14 Environment Canada's treatment of the Montreal Protocol envisages this (see ibid.).

15 See Arlon R. Tussing, "Economic Strategies for Energy and the Environment in California" (testimony before the California Energy Commission, July 10, 1989).

simply wishing to avoid the incidence of a particular form of pollution, are prepared to purchase and retire credits, forcing those who cannot meet standards to pay more for their credits.

To repeat, government intervention and institutionalized processes are but a proxy for private individual negotiations. Intervention *is* necessary, since private parties may not make the socially optimal decision. But intervention most certainly complicates and may distort the process, making it inefficient and compromising its effectiveness. Accordingly, a government environmental policy framework must, wherever possible, avoid the traditional, institutionalized modes of regulation that required such sweeping reforms in the 1980s, and experiment aggressively with more sensitive proxies. Where market mechanisms can be made to work, their efficiency will enhance government's endeavors to approximate most closely the socially optimal decision.

Many environmentalists are not enamoured with an economic approach to the environmental challenge, which utilizes cost-benefit analyses, or with the use of market mechanisms. The notion of pricing the environment seems repugnant to some, since pricing implies tradeoffs between environment and the economy. They also dislike the idea that it is both environmentally and economically more efficient to permit a few polluters to exceed uniform standards, while others profit by doing better. These attitudes make it difficult for government to achieve consensus when forming an environmental policy framework.

Market mechanisms are not a universal panacea, but for strictly circumscribed reasons. When markets fail — for example, when competition is lacking — the superimposition of market mechanisms to expedite environmental policy goals may not work. In an oligopoly, which preserves a measure and the illusion of competition, the dominant producer may be so efficient as to claim all of the allocatable "pollution rights," thereby controlling pricing and garnering the power to convert

an oligopoly to a monopoly. Obviously, market mechanisms cannot afford the most efficient approach in all instances.

Thus far, as the Canadian environmental policy debate has progressed, the analysis of market mechanisms seems to have been subsumed by the assumption that traditional command-and-control techniques will be adopted. In the Institute's judgment, however, every attempt should be made to adopt market-based instruments, in the interests of speedily achieving environmental policy goals most efficiently. Command-and-control techniques should be applied only where market failures preclude the adoption of market mechanisms.

Some Issues of Governance

As daunting as it may be, the environmental challenge cannot be regarded as a systemic failure or the result of inherent internal contradictions within the Western industrialized democracies. Environmental degradation is not the result of hedonist consumerism or predatory capitalism. Mainly, it is the failure to account properly for the use of common properties, owned by all but controlled by none. In part, it is also a failure of markets and the failure of government to intervene in a timely and effective manner. And it reflects the willingness or inability of humans to envisage the effects of their activities on society's resources over the very long term.

A measure of government intervention is, therefore, necessary. But, while the solution to any single problem may be complex and very expensive, the principles informing the development of these solutions are not. Guided by the best available scientific information and technological competence, government must set standards that, over time, will enhance society's resources — including the environment — without placing an arbitrarily artificial value on any one resource that is so high that other societal goals will be compromised.

"Over time," then, refers to a transition phase that accommodates tradeoffs between the environment and economic growth, as well as the assumption by both current and future generations of the risks attributable to new technologies and to scientific uncertainty. This can only be a matter of judgment, requiring the exercise of statesmanship of the highest order.

Once standards are set, government should focus wherever possible on market mechanisms as policy instruments. Greater efficiency of implementation will permit government policies to approximate more closely the social optimum. Efficient methods can also produce superior results for the environment.

As daunting as this task will be, it may be more difficult to sustain the degree of public consensus that will permit Canadians to adapt rapidly to the environmental challenge. Environmentalists have performed an enormous public service by alerting society to the error of its ways. But many environmentalists function within an ideological framework that is antithetical to that of a pluralistic system which emphasizes other social goals as well.

Canada's social system deals in multiple values, not a hierarchical ranking of values. Tradeoffs, therefore, are essential. So, too, is a commitment to technological progress. The interactions among markets, prices, and investments in new technologies offer greater promise both for a better environment and for economic opportunity.

Sustaining consensus means, then, that no party can be allowed to hijack the process. It means that government should try to avoid heavy-handed control-and-command techniques, which are inflexible, breed resentment in the private sector, and funnel too much of the capital dedicated to the environment through bureaucracies instead of through markets. It means that individuals must actively volunteer their efforts — as in recycling. It means that industries must desist from the sterile "jobs *versus* the environment" debate. And it means that the environmental movement must adapt to the solutions af-

forded by a market economy in a pluralistic system, eschewing the temptation to exercise its mastery of process to obstruct development.

To achieve consensus, government must improve its consultative processes. Because of uncertainty, it will be a matter of learning as one proceeds, and the dialogue should be open and interactive and should include all stakeholders. Thus, new evidence can be internalized and consensus preserved as "action frameworks" are recalibrated.

As well, all levels of government in Canada must strive for consistency, and avoid their proclivity for competing and overlapping initiatives. The economy, already in a stressful period of global readjustment, should not be further burdened by political turf wars over the environment.

Consistency also means integrating environmental policy within the overall policy framework. Subsidizing energy megaprojects, under the guise of regional economic initiatives, sends all the wrong environmental policy signals.

Finally, government must at all costs avoid being capricious.[16] Inevitably, in arbitrating fractious disputes about the impacts of specific developments on the environment, government will be required to decide without conclusive evidence. Sometimes, its decisions will turn on concerns about pervasive and irreversible damage, or on the perception of society's willingness to shoulder a particular risk profile. But at all times, all participants — agreeing to disagree — should believe that the process has been served by the application of a consistent set of principles, founded in science and supported by a continuing commitment to advance the frontiers of knowledge.

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16 Suspending even the consideration of drilling off the Georges Bank until the year 2000 is an example that comes to mind.

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